VOLUME 3 1944

INTERNATIONAL JOURNAL OF SEX-ECONOMY AND ORGONE-RESEARCH

OFFICIAL ORGAN OF THE INTERNATIONAL INSTITUTE FOR SEX-ECONOMY AND ORGONE-RESEARCH

DIRECTOR: WILHELM REICH, M. D.

EDITOR: THEODORE P. WOLFE, M. D.

LIBRARY OF
BIM & BILL MOISE

Love, work and knowledge are the well-springs of our life. They should also govern it.

ORGONE INSTITUTE PRESS NEW YORK

VOLUME 3 1944

INTERNATIONAL JOURNAL OF SEX-ECONOMY AND ORGONE-RESEARCH

OFFICIAL ORGAN OF THE INTERNATIONAL INSTITUTE FOR SEX-ECONOMY AND ORGONE-RESEARCH

DIRECTOR: WILHELM REICH, M.D.

EDITOR: THEODORE P. WOLFE, M.D.

LIBRARY OF
BIM & BILL MOISE

Love, work and knowledge are the well-springs of our life. They should also govern it.

ORGONE INSTITUTE PRESS NEW YORK

THE INTERNATIONAL JOURNAL

OF

SEX-ECONOMY AND ORGONE-RESEARCH

is published by the

ORGONE INSTITUTE PRESS

157 Christopher Street, New York 14

SUBSCRIPTION, *$4.00 per year*

EDITOR'S ADDRESS: *Dr. Theodore P. Wolfe, 401 East 56 Street, New York 22, N. Y.*

Make checks payable to Orgone Institute Press, Inc.

COPYRIGHT, 1944, ORGONE INSTITUTE PRESS, INC.

PRINTED IN THE UNITED STATES OF AMERICA

CONTENTS, Vol. 3, 1944

ARTICLES

Arnold, Carl

Sex-economy: A theory of living functioning 17

Martin, Paul

Sex education in the schools 188

Reich, Wilhelm

Thermical and electroscopical orgonometry (The discovery of the orgone, Part 2) 1
The masochistic character 38
Orgonotic pulsation 97
The "living productive power, working power" of Karl Marx 151

Wolfe, Theodore P.

A sex-economist answers, Part 2 62
On a common motive for defamation 71
The stumbling block in medicine and psychiatry 165

REVIEWS

Nathan, Peter: THE PSYCHOLOGY OF FASCISM *(Harry Obermayer)* 81
Doshay, Lewis J.: THE BOY SEX OFFENDER AND HIS LATER CAREER *(T. P. Wolfe)* 82
Guyon, René: THE ETHICS OF SEXUAL ACTS *(A. Lowen)* 205
Phillipson, Herbert: EDUCATION—A SEARCH FOR NEW PRINCIPLES *(Harry Obermayer)* 210
Levin, Diana: CHILDREN IN SOVIET RUSSIA *(Harry Obermayer)* 212
Lorand, Sandor, ed.: PSYCHOANALYSIS TODAY *(Gladys Meyer)* 213

NOTES

Rational and irrational discussion of orgone biophysics 74
"Nuttier than a fruit cake" 79
A sex-economic prediction come true 80
The orgone energy in early scientific literature 191
A clarification 195
Some observations of children 197
From the Orgone Institute Press 203
Addresses of the Institute 204

EXCERPTS from *A. S. Neill's* THE PROBLEM TEACHER 87
EXCERPTS from *A. S. Neill's* THAT DREADFUL SCHOOL 220

International Journal of Sex-Economy and Orgone-Research

VOLUME 3, NUMBER 1 MARCH 1944

FROM THE ORGONE AND CANCER RESEARCH LABORATORY

THERMICAL AND ELECTROSCOPICAL ORGONOMETRY

The Discovery of the Orgone, Part 2*

By WILHELM REICH, M.D.†

CONTENTS

Introduction
V. Measurements of the atmospheric orgone
1. Temperature differences
2. Demonstration by measurements with the static electroscope
3. Quantitative determination of the orgone

INTRODUCTION

In the first part of this report † I related how I discovered the orgone energy and how it can be made visible. In the present report I shall describe the methods of quantitative measurement of the orgone by means of the electroscope and the thermometer. In the course of this presentation, we shall meet not only fundamentally new facts of physics but also some peculiar relationships between the orgone and weather formation. The results here presented have been checked now over a period of 4 years.

1. TEMPERATURE DIFFERENCES

The metal walls of our orgone accumulator are "cold." If we hold our palm or tongue at a distance of about 10 cm from the wall, we feel, after some time, *warmth* and a *prickling* sensation. On the tongue, we perceive a salty taste. If we put a thermometer in the same place (or, better, above the top of the accumulator), and a second thermometer outside of the accumulator, we find to our surprise a difference of 0.2° to 0.5° C. as compared with the room temperature.

This can *not* be "heat" radiated by the walls of the accumulator. We do not understand this fact; we have to become accustomed not to want to understand individual findings outside of their context. Once we have found a significant connection between two or more findings, we are able to form a bit of theory. Whether that theory is correct or incorrect, complete or incomplete, can only be shown in the course of further work. If the theory is correct, it will inevitably lead to new findings and new connections. If it is wrong, it will inevitably lead into a wrong direction.

Since the temperature at the metal wall is lower than at some distance from it, the warmth which we feel at our palm and which the thermometer registers can-

* Translated from the manuscript by the Editor.
† *Cf.* "The Discovery of the Orgone," *This Journal* 1, 1942, 108-130.

not be heat as such radiated by the wall. There are, indeed, no sources of heat at or behind the wall, within or under the accumulator. We have to venture an assumption and see where it leads us.

As we know, radiation in general consists of *moving energy particles*. Let us assume for the present that the cold metal walls of the accumulator radiate or reflect energy. We must make the following assumption: When we put our hand or a thermometer at a distance of, say 6-10 cm from the wall, we *stop* the movement of the energy particles. *The stoppage changes the kinetic energy of the particles into heat which causes the feeling of warmth at the hand and the objective temperature rise at the thermometer.* This assumption is in accord with the physics of any radiation; for example, the stoppage of the electrons in an Xray tube, as they fly from the cathode to the anticathode, produces heat and light phenomena.

For our experiments, we build a small orgone accumulator. Six iron sheets of 1 square foot are built into a cube (*cf.* fig. 1, p. 3). At the outside of the top sheet we put a cylinder of about 15 cm length into which we can introduce a thermometer. A hole beside it makes it possible to read the temperature *within* the box. In order to insulate the inside of the cylinder against the influence of the room temperature, we surround the cylinder with cotton or another material with low heat conductivity. In addition, we screen the cylinder with a glass lampshade. No organic substance should be placed between thermometer and the metal surface.

The idea behind this experimental set-up is the following: The energy particles *within* the box are being thrown from metal wall to metal wall. They are being stopped on all sides. Since heat ascends, any possible temperature rise will be most readily registered above the top metal sheet. There must be a *temperature difference* between the enclosed air in the cylinder above the accumulator on the one hand and the rest of the room on the other. Let us call the temperature of the air in the room T, that of the cylindrical space To. If our assumptions are correct, the temperature difference (To — T) must be *positive* and *always present*.

Measurements over a number of days reveal a temperature difference between 0.2° and 1.8° C. Measurements taken several times a day over a period of weeks reveal an arithmetic mean of about 0.5° C. Since the box contains no constant source of heat, the temperature difference can be due only to the stoppage of the radiation. Let us summarize what we have learned thus far about the orgone energy:

1. Organic substances absorb the energy.
2. Metallic substances reflect it.
3. Stoppage of the kinetic energy by any metallic obstacle results in a temperature rise.

This calls our attention to an error in the construction of the box. The metal walls reflect the energy and the heat to the *outside* as well as to the inside. So, in order to provide an insulation against the surrounding air, we cover the metal box with organic material such as cotton. To hold this in place we surround it with a second box of plywood or celotex. The inside of the box is made accessible by a door in the front wall.

The outside of the apparatus consists of organic material, the inside of metallic material. Since the former absorbs the energy while the latter reflects it, there is an *accumulation* of energy. The organic covering takes up the energy from the atmosphere and transmits it to the metal on its inside. The metal radiates the energy to the outside into the cotton and to the inside into the space of the accumulator. The movement of energy toward the inside is free, while toward the outside it is being stopped. Thus it can oscillate freely on the inside, but not to the outside. In addition, part of the energy given

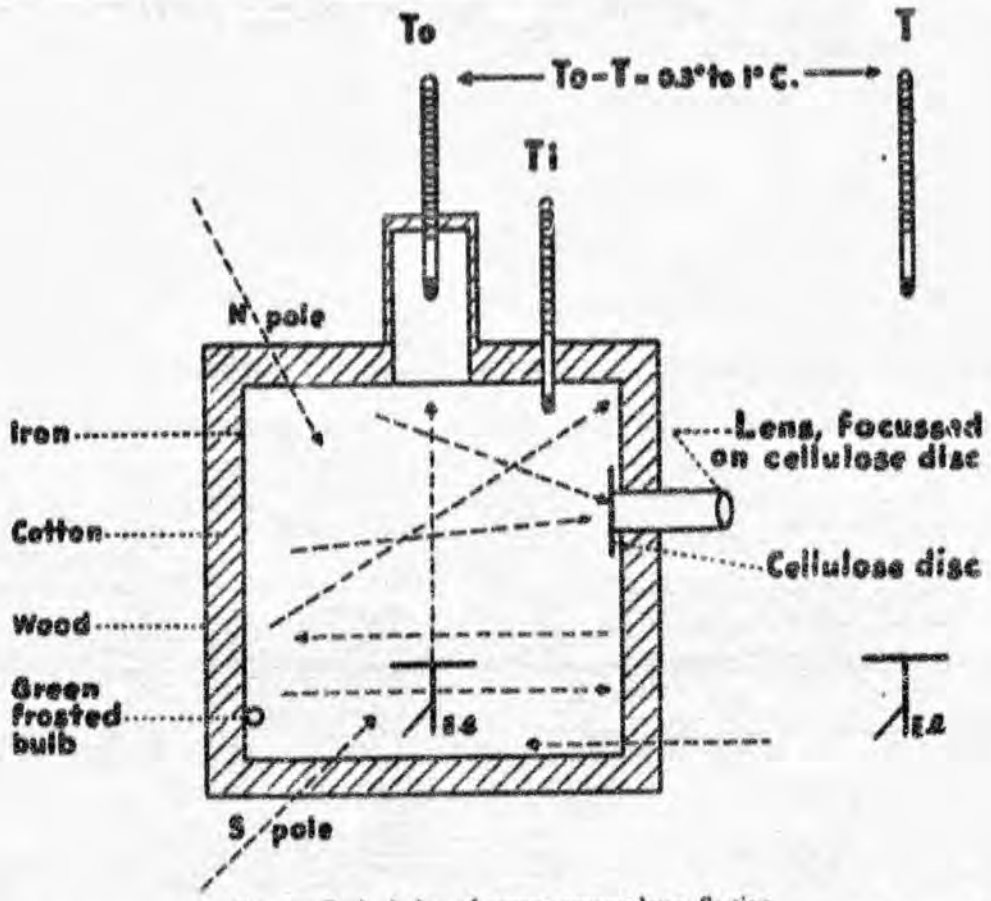


Fig. 1. Basic design of orgone accumulator. Section.
To = temperature above accumulator; Ti = temperature within accumulator; T = control (temperature of air in room).
El = electroscope. — — — — — → = direction of radiation. Size: 1 cubic foot.

off by the metal toward the outside is absorbed by the cotton and given back to the metal. In which manner the energy penetrates the metal we do not know. All we know is that it *does* penetrate it, for the subjective and objective phenomena are far more intensive within the apparatus than on the outside.

After covering the metal with organic material we find that the temperature difference To — T is *more constant* and also *greater*, other things being equal. *We have built an accumulator which confines and concentrates the orgone.*

As a control, we make the same experiment with a box of the same size built of wood or cardboard only. We soon find that in such a box, temperatures are completely equalized: the temperatures are the same everywhere. The temperature differences appear only when the box is lined with metal on the inside.

Orgone measurement in the open air. During the summer months of 1940, I kept a small orgone box partly buried in the ground in my garden. There was a constant temperature difference. But not until the following February did I find out how much greater was this difference than that found in the closed room. On February 15, 1941, a sunny day with a strong cold wind, I buried an orgone box to the depth of two-thirds of its height in the soil. Thus the box thermometer (I)

was still *above* the soil level (*cf.* fig. 2, p. 4). The box, including the thermometer casing above it, was in a second box of cardboard; the space between the two boxes was filled with cotton and wood shavings; the whole thing was covered with a wool blanket. (The space in which the temperature is measured, of course, has to be well protected against the low outside temperature.) A control thermometer (II) was put through a hole in the bottom of a glass jar, and this was buried 4 inches deep in the soil, which brought the bulb of the thermometer *below* the soil level. A second control thermometer (III) was stuck about 1 inch deep into the soil, without any covering. This thermometer (IIIa) was also used for measuring the air temperature above the soil, at about the height of the box thermometer, with and without covering as protection against the wind. The drawing (fig. 2, p. 4) and the table on p. 5 show the arrangement and the results.

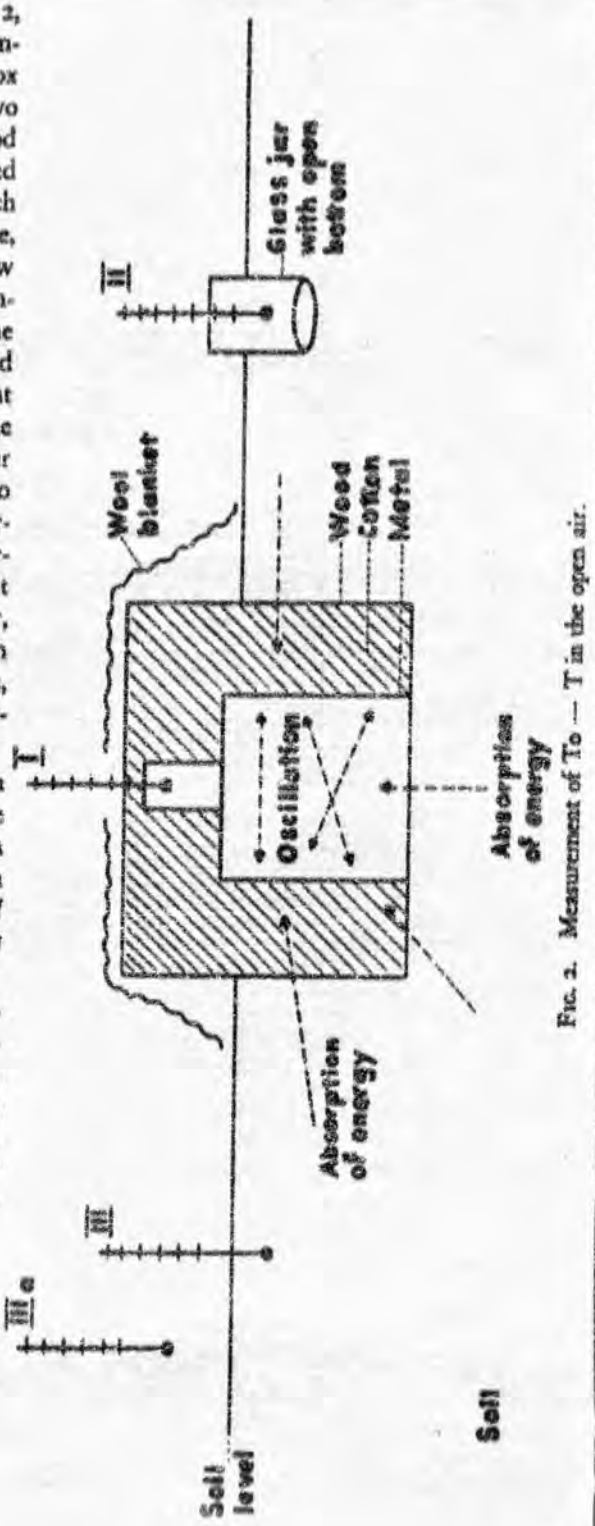


FIG. 2. Measurement of To — T in the open air.

In this experiment, To — T showed a much higher value than in the inside room, probably because of the elimination of the secondary orgonotic radiation from walls, table tops, etc. *In the open air and without sun, the difference was about* + 2° *C.*

In order to make doubly sure, I continued the experiment overnight and during the following day, from February 16th to February 17, 1942, in the following manner: I left the apparatus in the open air without the blanket, that is, I let it get completely cooled by the low night temperature. At 9.30 A.M. on February 17th, the air temperature was — 1° C., the soil temperature 0° C. I put the cold blanket back on the apparatus and introduced the thermometer which had just registered an air temperature of — 1° C. into the cylinder on top. Soon it registered + 2.3° C., while the air temperature remained at — 1° C. and the soil temperature at 0° C.

Reading No.	Weather	Time	Air Free	Air Protected	Soil	To — T Compared with Air	T-Org. Above Soil	Air in Glass Jar	Remarks
1	Clear; cold wind	2-16-41 12.30 P.M.	3.6°	5°	0.5°	+ 8°	11.6°	1.5°	Apparatus, with thermometer, under cardboard cover, except front. Two-thirds under ground, beginning at 12 Noon
2	Clear; cold wind	1 P.M.	3.4°	4.6°	0.3°	+ 8°	11.4°	1.5°	
3	Clear; cold wind	1.45 P.M.	2.1°	3.5°	0.4°	+ 7.4°	9.5°	1.5°	Wool blanket over apparatus
4	Apparatus in shade	2.30 P.M.	0.3°	0.6°	0.4°	+ 6.2°	6.5°	1.3°	Wool blanket over apparatus
5	Apparatus in shade	3.30 P.M.	0.2°	0.3°	0.3°	+ 2.7°	2.9°	1.3°	Elimination of sun radiation
6	Apparatus in shade	4 P.M.	— 0.6°	0.6°	0.2°	+ 1.2°	+ 0.6°	0.4°	Wool blanket over apparatus
	Freezing temperature								Effect of freezing temperature
7	Apparatus in shade	5 P.M.	— 0.9°			+ 0.9°	0°	0.2°	Wool blanket over apparatus
	Freezing temperature								Effect of freezing temperature
8	Apparatus in shade	12 P.M.	— 2.1°			+ 1.7°	+ 1.7°	— 0.4°	Measurements interrupted; wool blanket removed
	Freezing temperature								
9	Cloudy	2-17-41 9.30 A.M.	— 1°	— 1°	0°	+ 2.8°	+ 1.8°	+ 0.7°	Apparatus remains in the open overnight; in the morning again covered with blanket
10	Heavy snowfall	11.30 A.M.	— 1°	— 1°	0°	+ 3.3°	+ 2.3°	0.9°	Thermometer exchanged with each reading
11	Heavy snowfall	12.15 A.M.	— 0.9°	— 0.9°	0°	+ 2.2°	1.3°	0.7°	
12	Heavy snowfall	1 P.M.	— 0.7°	— 0.7°	0°	+ 2°	1.3°	0.7°	
13	Heavy snowfall	2 P.M.	— 1°		0.3°	+ 2.2°	1.2°	0.7°	
14	Heavy snowfall	3 P.M.	— 1.1°		0.3°	+ 2.3°	1.2°	0.3°	
15	Heavy snowfall	4 P.M.	— 1.2°		0.2°	+ 2.2°	1°	0.6°	Thermometer exchanged
16	Heavy snowfall	5.30 P.M.	— 2°		0.1°	+ 2.5°	0.5°	0.2°	

The air within the buried glass jar showed + 0.9° C.

These findings are unequivocal[1] and show the following:

a) *The soil and the atmosphere contain an energy which is thermically measurable in our apparatus.*

b) The energy is measurable in high values only with the use of a *definite arrangement of materials*. That is, in order to obtain an *increase* in the temperature difference (To — T), one must use organic material on the outside and metallic material on the inside.

This experiment also shows the significance of the arrangement of materials in connection with the radiation of the soil and the sun. When the influence of the sun radiation is eliminated by shade, the difference To — T decreases, compared with all control measurements, from an average of about + 5° C. to an average of about + 2° C. The glass-covered control thermometer, which is exposed only very little to the soil orgone radiation, shows a difference of only about 1° C. The orgone accumulator—thus far the most efficient apparatus for the concentration of the orgone energy—shows far higher values, that is, *more than + 2° C.*

The temperature *decrease* in the open air due to the low night temperature shows in the box in spite of the insulation. Nevertheless, the difference (To — T) remains constant within certain upper and lower limits because of the *parallel* drop of To and T. Observations during about 3 hours showed the following:

To	= 11.4°	To	= 9.5°
T air	= 4.6°	T air	= 3.5°
To — T	= 6.8°	To — T	= 6.0°

To	= 6.5°
T air	= 0.6°
To — T	= 5.9°

Summary of experimental results:

1) The apparatus described shows, under all circumstances, a temperature difference between the thermometer above the apparatus and the control thermometer, in the absence of any constant source of heat of any known nature.

2) Measurements in the open air demonstrate a radiation from the soil which, depending on different arrangement of materials, manifests itself in varying differences of temperature.

The temperature difference in the open air varies with the intensity of the sun radiation and with the hours of the day. On sunny summer days, differences up to 20° C. are not rare. (It goes without saying that the orgone thermometer is never exposed to direct sun light).

The thermometric measurement of the soil orgone radiation can be done in various other ways. One only has to know the basis of comparison. One can compare To with T air or T soil. The To of the air is different from the To of the soil. Similarly, it makes a difference whether we measure inside a vertical orgone tube without a metal plate or above such a plate in the tube. The diagrams (*cf.* fig. 3, p. 7) illustrate a few methods of measuring the temperature difference.

Summarized, the results are the following:

In a metal tube, the temperature increase is greater above a metal cross-plate than without such a plate.

During rainy weather, the temperature differences are minimal or altogether absent.

[1] This particular experiment was done in order to refute a certain objection which had been raised. A physicist tried to explain the temperature difference at the accumulator by "heat convection from the room ceiling to the table top." He failed, however, to check his interpretation of the temperature difference by simply measuring it *in the open air and in the soil* where there cannot possibly be a "heat convection from the room ceiling to the table top." If one does so, one finds that there is a consistent temperature difference which varies only with the weather.

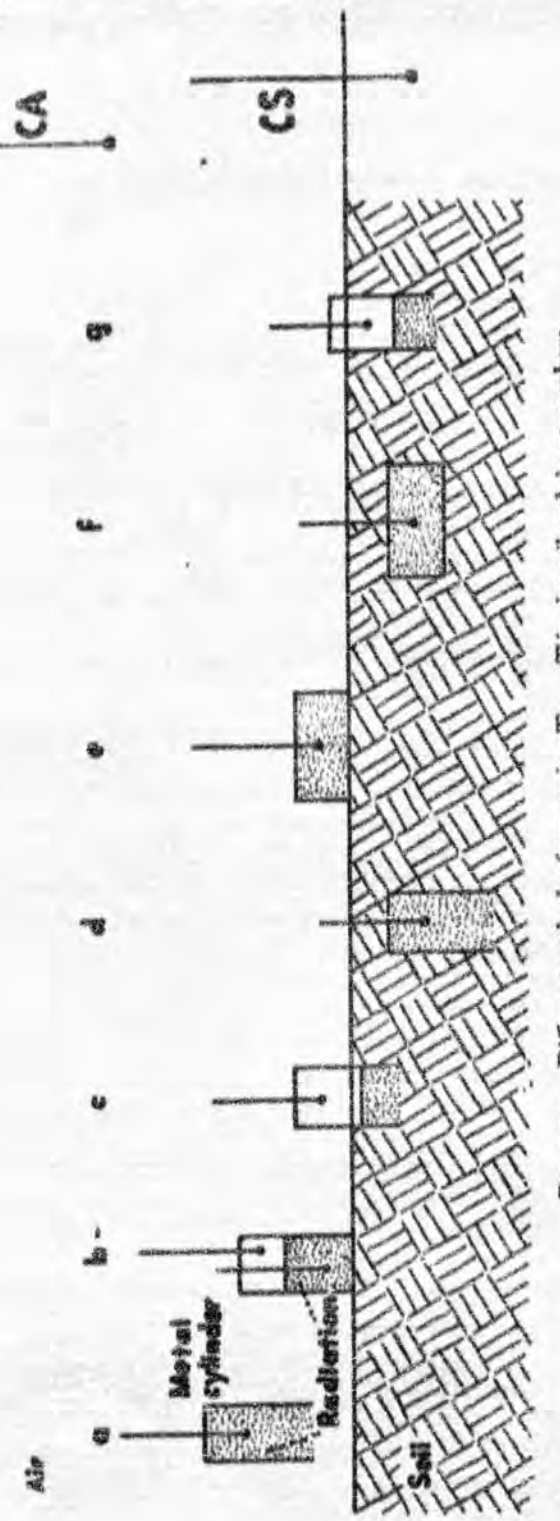


Fig. 3, a-g. Different methods of measuring To — T in the soil and the atmosphere.

With intensive sunshine, they return and reach high values.

In order to get the effect of the *orgone radiation*, we leave the tube open. In order to get the *temperature difference*, we close the tube and measure the temperature above the plates.

2. DEMONSTRATION BY MEASUREMENTS WITH THE STATIC ELECTROSCOPE

The measurements of the temperature difference To — T show that a radiating energy works inside of the apparatus. They say nothing about the *nature* of this energy. Neither do the subjective light phenomena, in spite of the fact that they are very impressive and convincing.

We measure the discharge of the electroscope systematically several times a day over a period of months, within the orgone accumulator, in the room and in the open air. This is done with the following considerations:

Charged electroscopes discharge *more rapidly* in strongly ionized air than in weakly or non-ionized air. "Ionized air" means air which contains negative electric units, or "electrons." The air in a room can be "ionized" by Xrays or ultraviolet rays. Air at high altitudes is more highly ionized than air at sea level. Charged electroscopes discharge *more rapidly* in strongly ionized air because that air forms a conductor between the various parts of the electroscope so that the charge of the metal walls and that of the electroscope leaf are more quickly equalized than in non-ionized air which is not such a good conductor. This is the principle of electroscopic measurements in the investigation of cosmic rays.

In measuring the electroscopic discharge within and without the orgone accumulator, we may expect the following possible results:

1. *The speed of discharge is the same inside and outside.* This would mean that the charge in the apparatus is the same as outside, in other words, there is no concentration of the atmospheric orgone energy inside. In that case, the phenomenon of the temperature differences would be incomprehensible.

2. *The speed of discharge is greater inside than outside.* This would mean that the air within the apparatus is more strongly ionized than on the outside, that is, it contains more negative electrical particles (electrons). In that case, our orgone energy would be *identical with negative electricity.* In this case, also, the fact that the orgone energy is absorbed by organic materials would be incomprehensible.

3. *The speed of discharge is less inside than outside.* This would mean that our orgone energy is *not* identical with negative electricity. In this case, the fact that the electroscope discharges more slowly inside and why this indicates a concentration of the orgone energy, would have to be explained. Only in this third case would the subjective phenomena, the temperature difference and the speed of the electroscopic discharge become understandable in the same light. In this case, our orgone theory would be considerably advanced, because now several manifestations of the energy would be reduced to *one* principle.

The experiments show, in fact, that the speed of discharge is *less on the inside than on the outside.* We shall postpone the how and why of this observation and simply record this fact. From this we conclude:

1. *The orgone energy tension within the apparatus is different from that outside.* The difference in tension indicates a difference of potential between inside and outside. The question remains whether the drop in potential is from the inside to the outside or vice versa.

2. *The energy within the apparatus cannot be the result of a stronger ionization of the inside air;* otherwise, the electroscope would discharge more rapidly inside, instead of more slowly. That means that the energy is an energy *other than negative electricity.*

Equally rapid or more rapid discharge within the accumulator would be easy to explain in the framework of known theories. A discharge which is *slower* on the inside than on the outside, however, is difficult to explain.

Here we are aided by the fact that we charge the electroscope from cotton or cellulose or from our hair (provided it is dry) by means of a cellulose disk or a rod of polistyrene or rubber. These substances take up the energy from our hair. The energy is present in the air inside the apparatus as well as outside, only in a *different concentration,* as is shown in the difference in the speed of discharge. The electroscope communicates with the air through the disk at the top and through holes in the casing, while the latter is grounded. The energy with which it is charged from the sun radiation or our body is given off into the air in the process of discharge. We are justified in making the following assumption:

The energy with which the electroscope was charged will be discharged into the air *the more rapidly the lower the energy tension is in the air* relative to the charge of the electroscope. Conversely, the energy will be discharged the more slowly the higher the tension is in the surrounding air, that is, the smaller the difference between the energy tension of the electroscope and that of the surrounding air.

This assumption is in full accord with the general laws of energy: Water flows all the faster from a higher basin to a lower one the greater the difference in height between the two, and vice versa. The speed depends on the steepness of the drop, or, in other words, on the difference in energy of position. The metallic plate of the electroscope *discharges more quickly into air with a low energy tension than into air with a high tension.*[2]

This characteristic of our energy is new. It cannot be explained by the theory of ionization. Electrically highly charged air would cause the electroscope to discharge more rapidly. Therefore, *our energy cannot be electricity.* This inevitable conclusion is disturbing, for an energy which has electroscopic effects and yet is not electromagnetic energy sounds implausible.

We have to check another objection: The spontaneous discharge of the electroscope is slower within the apparatus because the air circulates more slowly in it than in the open air. Consequently, the exchange of the air ions takes place more slowly inside, and this is the reason for the slow discharge; therefore, the phenomenon is explained by the theory of ions, in other words, electricity.

This objection is easy to check. We measure the speed of discharge of the electroscope in the open air. Then we charge it again to the same mark and make the air around the electroscope circulate more rapidly with the aid of an electric fan. The experiment is then repeated in the room. We find that the fan does *not* influence the speed of discharge. The difference in speed of discharge, then, cannot be ascribed to the circulating air. The speed of discharge depends *only on the atmospheric orgone tension.* This tension is determined by the density, or concentration, of the orgone particles per cubic unit of air.

Our observations show the concentration of the energy in the apparatus to be higher than in the open air. The term *accumulator of atmospheric energy* is therefore justified.

Theoretically, enclosed electroscopes should not lose their charge. The fact remains that even enclosed electroscopes

[2] I am trying intentionally here to explain the difference in speed of discharge on the basis of the traditional theory of the potential difference. As will be shown in a different context, another, purely biophysical interpretation does better justice to the facts.

show a spontaneous discharge. This is what the physicists call the "natural leak" and ascribe to the humidity of the air. *Thus what we measure is really the phenomenon called "natural leak."* We do not try to seal the air in the electroscope hermetically against the outer air; on the contrary, we let it intentionally communicate with the outer air. We determine just that phenomenon which the physicist, in measuring the effect of some electrical radiation, attempts to exclude, and which, to the extent to which he fails to exclude it, he subtracts from the effect. The spontaneous discharge of the electroscope which takes place "for no known reason" *is nothing but the normal effect of the atmospheric orgone.*

Another objection which might be raised is this: The inner metal walls screen the inside of the accumulator against the effect of radio-active substances; it is for this reason that the electroscope discharges more slowly inside than outside. This objection is refuted as follows:

1. The phenomenon (slower discharge inside) as well as the temperature difference, is present everywhere, no matter where we place the apparatus. It is more than unlikely that "radio-active substances" are present *everywhere.*

2. If the phenomenon were due to radio-active substances on the outside of the apparatus, the discharge would be more rapid in a simple wooden box than if this wooden box is screened with metal plates on the *outside* against radio-activity. In reality, it is slower and not more rapid under these conditions. This refutes the objection and is a further proof of the correctness of our interpretation.

3. QUANTITATIVE DETERMINATION OF THE ORGONE

As we have seen, the orgone energy expresses itself in temperature differences and in differences of electroscopic discharge. These facts can be made the basis of *quantitative* orgone measurements. To begin with, we define the unit of orgone energy, *one Org:* This is the amount of orgone energy in a space of 1 cubic foot which corresponds to the maintenance of a temperature difference (To — T) of 1° C. for 1 hour, according to the formula

$$1\ \text{Org} = (\text{To} - \text{T}) \cdot t \cdot f^3.$$

(To — T = 1° C.; t = 1 hour; f^3 = 1 cubic foot).

The *amount* of orgone energy, i.e., the number of orgone energy particles in a unit of space (Org), has to be distinguished from the *orgone tension* (Op). We shall call 1 Op that atmospheric orgone tension which in the time unit of 1 hour (T', 60 t', 3600") decreases the charge of an electroscope by the amount of one unit (Eo — Er = 1).

If one Op (Atm) designates the unit of the atmospheric orgone tension, Eo the charge of the electroscope, Er the remaining electroscope charge after reading, (Eo — Er) the amount of discharge, and t' the time in hours, then

$$\text{Op} = \frac{t'}{\text{Eo} - \text{Er}} = 1$$

is the formula for the atmospheric orgone tension in the open air. The Op *within* the orgone accumulator we differentiate by appending the sign "accu." Op can also be directly expressed in hour-Org, minute-Org or second-Org, depending on whether a unit of charge is discharged in an hour, minute, second or multiples thereof:

1 hour Op	=	60 minute-Org	(60'0)
0.75 Op	=	45 minute-Org	(45'0)
0.5 Op	=	30 minute-Org	(30'0)
0.25 Op	=	15 minute-Org	(15'0)
0.16 Op	=	10 minute-Org	(10'0)
0.1 Op	=	6 minute-Org	(6'0)
0.05 Op	=	3 minute-Org	(3'0)
0.015 Op	=	1 minute-Org	(1'0)
0.00025 Op	=	1 second-Org	(1"0)

If, for example, one unit of electroscope charge is discharged in 30 minutes, then Op is:

$$\text{Op} = \frac{0.5\ (t')}{1\ (\text{Eo} - \text{Er})} = 0.5, \text{ or, Op} = 30'$$

org.

If, for example, the total charge of the electroscope Eo = 5 Org (the equivalent of 630 volts) is discharged in 20 minutes, Op is:

$$\text{Op} = \frac{0.33\ (t')}{5 - 0\ (5\ \text{Eo} - 0\text{Er})} = 0.066, \text{ or,}$$

Op = 4' Org, that is, 4 minute-Org.

Whether one prefers one or the other method of calculation is merely a matter of convenience.

The orgone charge of the electroscope can also be expressed in electrostatic units. An "electrostatic unit" equals about 300 volts. We charge an electroscope with energy from our hair so that the electroscope leaf is deflected 45° or 90°. We can produce the same effect by applying an electric current of high voltage to the electroscope. *One unit of orgone charge then corresponds to that voltage which is necessary to produce the same deflection of the electroscope leaf.* We find in this way that by stroking our hair softly only *once* we can take off energy amounts of hundreds of volts.

The instrument which was used in these measurements is a static electroscope with aluminum leaf. The volt calibration in the laboratory of the Radio Corporation of America showed the following values:

Scale Divisions	Volts	
1	135	approximately 45 volts per scale division
2	180	
3	225	
4	270	
5	330	approximately 60 volts per scale division
6	390	
7	450	
8	510	
9	570	
10	630	approximately 100 volts per scale division
11	730	
11½	780	

Difference: 120 volts

In our experiments, we always charged the electroscope from our hair up to the *tenth* scale division, that is, with an amount of energy equivalent to about 630 volts. We then let it discharge to the air two scale divisions, that is, the orgone equivalent of about 120 volts. *Two scale divisions (8 to 10) correspond to 1 orgone charge unit, that is, the equivalent of 120 volts.* If the electroscope, after being charged to the tenth scale division, that is, with an orgone energy equivalent of 630 volts, discharges within 1 hour (60 minutes) 1 Org (= 120 volts), the orgone tension (Op) of the surrounding air is 1 hour-Op or 60 *minute-Op.* In other words, the electroscope discharged into the air 2 volts per minute.

We determined *1 Org* by the constant *temperature difference* (To — T) in an accumulator of 1 cubic foot in the course of 1 hour. In the *electroscopic* measurement we determine 1 Org as the equivalent of 120 volts. We do not know yet whether these two different determinations of the unit 1 Org are equivalent. The parallel course of the curve representing To — T and that representing the atmospheric orgone tension (Op Atm) seems to indicate that this is so. A definite answer to the question will require further research.

I would like to present the results of a few measurements which show interesting facts about the orgone tension in the atmosphere and about the relationship between the atmospheric tension and the tension in the accumulator. Many details here still require intensive work over a long period of time, but the essential points are clear. Fig. 4, p. 12, shows four superimposed orgone tension curves. "Op Atm" is the curve of the daily variations in atmospheric orgone tension, always measured at noon. "Op Room" describes the daily variations of the orgone tension in the room in which the orgone accumulator was kept at the time of these meas-

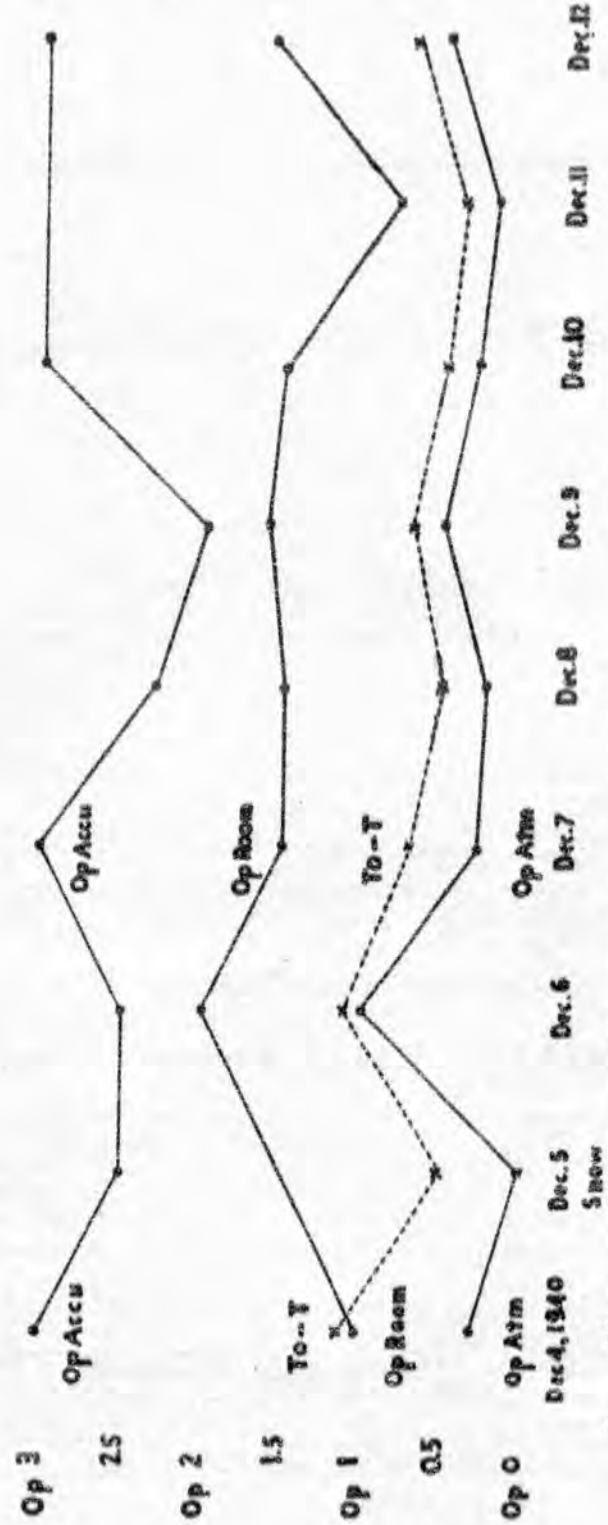


FIG. 4 Measurements of the atmospheric orgone in the open air, in the orgone accumulator and in the orgone room, and To — T. (Op 1 corresponds to To — T = 1° C.)

urements. The third curve, "Op Accu," represents the variations in orgone tension within the accumulator, measured between 12 and 1 P.M. The fourth curve (broken line) is the curve of the temperature difference (To-T) at the orgone accumulator, measured daily between 12 and 1 P.M., from November 29, 1940 to December 22, 1940, in an accumulator of 1 cubic foot, and beginning December 24, 1940, in an accumulator of 25 cubic feet (2′ x 2,5′ x 5′) built for therapeutic experiments with humans. (For reasons of space, only a section, covering 9 days, is reproduced in fig. 4, p. 12).

The curves show the following:

1. The tension curve of the room (Op Room) is, expressed in minute-Org, higher than that of the atmosphere; that of the accumulator (Op Accu) is higher than that of the room and that of the atmosphere (Op Atm). That is, *the energy concentration is highest in the accumulator.*

2. The curve of the temperature difference (To-T) runs *more or less parallel* to the tension curve of the atmospheric orgone (Op Atm).

3. The increase of tension in room and accumulator occurs *roughly one day after* the increase in atmospheric tension.

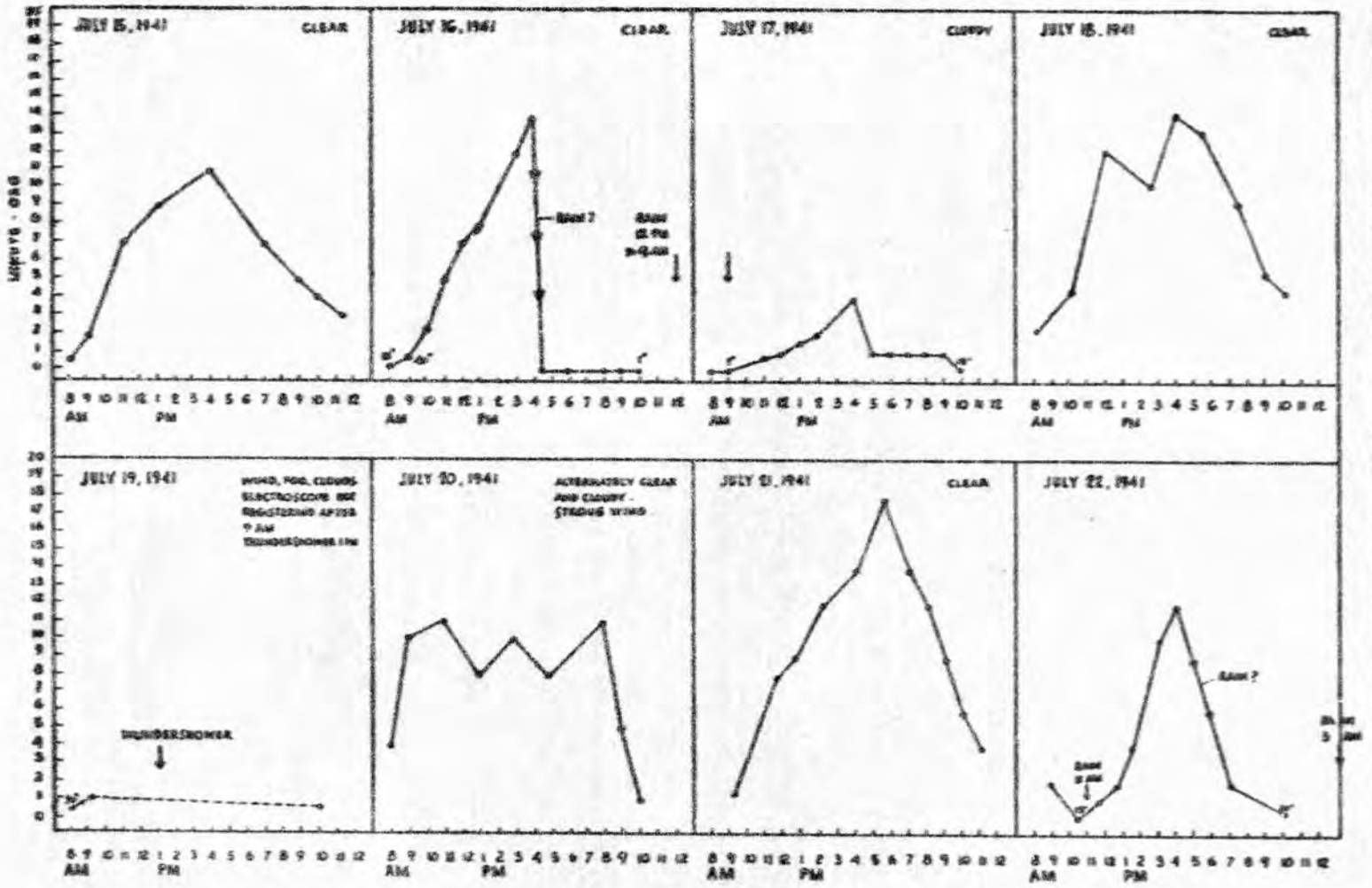
4. The atmospheric tension is *low on days with rain and snow, and high on days with sun.* The atmospheric tension varies between about 0 and 1. One or two days before rain or snowfall the atmospheric tension curve drops more or less sharply; the temperature difference curve also drops before or at the time of rain.

In other words, there is a *connection between atmospheric orgone concentration and weather formation.* Because we use the orgone accumulator for therapeutic purposes, the knowledge of this connection is important.

Here, we have to consider an important objection which might be raised on examination of these curves. The objection is this: In order to explain the drop in the curve, indicating a more rapid discharge before rainfall, we do not have to assume a special orgone energy. This phenomenon can be explained by the theory of the "electricity in the air." Previous to rain or a thunderstorm, the air is more highly ionized and that is what causes the more rapid discharge of the electroscope. I had this doubt myself, but there was the fact of the *slower* discharge of the electroscope within the accumulator.

This objection was completely refuted by the measurements taken in July and August, 1941, in my laboratory at Bald Mountain, Maine. I measured not only the daily variations at noon, but the variations of atmospheric energy tension from 8 A.M. to about 12 midnight every hour, in all kinds of weather. These measurements showed unequivocally that the discharges of the electroscope are based *not on variations in "air electricity" but on variations of the atmospheric orgone tension.*

Fig. 5, p. 14f., shows the daily variations of the atmospheric orgone tension between July 15 and 25, 1941. The discharge of the electroscope is far more rapid in the early morning than between noon and 4 P.M. It is slowest around noon. This results, of course, from the intense sun radiation, in other words—quite in accord with our other observations—*from a higher concentration of orgone energy.* It would be nonsensical to assume that in the early morning or late afternoon the atmospheric air is more strongly "ionized" than at noon, when the sun shines intensely. If the discharge were due to the electricity in the air, it would be *slower* in the early morning and late afternoon than at noon; but it is, on the contrary, more rapid. The highest concentration in the atmospheric energy is found around 4 P.M. On entirely cloudless days, the curve ascends and descends in a quite regular manner. On days, however, when sunshine alternates with cloudy weather, the curve shows an irregular up and down (*cf.*, for example,



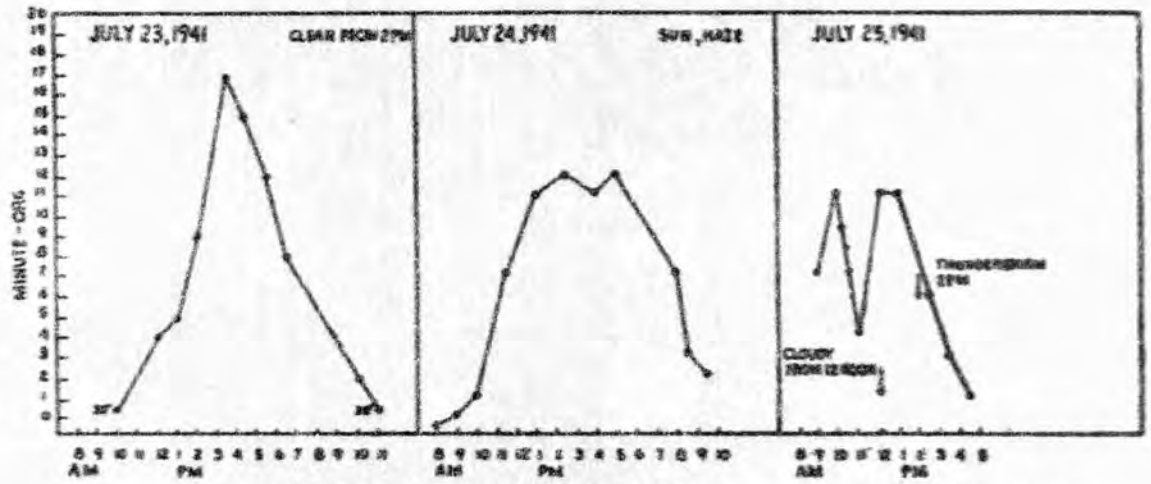


FIG. 5. Daily variations of the atmospheric orgone tension between July 15 and July 25, 1941.

the curve for July 20th). We find, furthermore, that *about 3 to 10 hours before a rainfall or thundershower, there is a rapid drop in the concentration of the atmospheric orgone energy*. The electroscope discharges very rapidly (less so in the accumulator than in the open air), and the temperature difference To-T becomes very small or disappears altogether. If the electroscopic discharge is measured regularly over a long period of time, one finds that the curve is roughly parallel to that of the temperature difference.

An inspection of the curves will show the following: On July 25, there was a shower at 2 P.M.; between 10 and 11 A.M. the tension had dropped from 12′ Org to 5′ Org. On July 16, between 4 P.M. and 4.30 P.M., that is, *within 30 minutes*, the tension dropped suddenly from 14 minute-Org to 10 second-Org. Around midnight, a heavy rainfall set in.

Similarly, on July 22, the tension dropped, between 4 and 7 P.M., from 12′ Org to 2′ Org; by 10 P.M. it was only 30″ Org. At 3 A.M. on July 23 a heavy, steady rain set in. On July 19, a windy and very cloudy day, the tension did not go above 1 minute-Org. At 10 A.M. the electroscope could no longer be charged, and at 1 P.M. a heavy thundershower set in which lasted until 3 P.M.

Conversely, days with a regular tension curve and relatively high orgone concentration in the evening (1 to 3 minute-Org) are regularly followed by a clear day. These daily variations are, of course, highly important for the therapeutic application of the orgone. If we want to give the patient a certain dosage of hour-Op or minute-Org, the exposure time will have to be different depending on whether it is early morning, noon or evening. This will be necessary as long as we cannot regulate the orgone tension in the accumulator independently of the weather.

Control measurements which have been constantly taken since the summer of 1941, again and again confirmed the fundamental finding: variations of the tension depending on the time of day, its drop previous to and during rain or snow, and the reactions at the electroscope which refute the explanation by ionization of the air.

The reader trained in physics will ask, *What is the connection between orgone and so-called static electricity?* This question will be discussed elsewhere.

Concluded October 1941

SEX-ECONOMY†

A Theory of Living Functioning

By Carl Arnold,* Ph.D.

At first glance it may seem strange that a theory about living functioning should have been named "sex-economy." One reason for the name has to do with the growth of the theory itself; but the name is also characteristic of the core of the theory, as we shall see later.

The originator of both the theory and the name is the Austrian physician and psychologist, Dr. Wilhelm Reich, born in 1897. He wrote the works which later became the basis of the new field of research during 1925-38. After receiving his M.D. in Vienna in 1922, Reich began to practice as a psychoanalyst in that city and soon had a large practice and a great reputation as a therapist. The founder of psychoanalysis, Sigmund Freud, foresaw a brilliant future for the young doctor. Reich became the leader of the technical seminar at the Psychoanalytic Institute of Vienna and soon was known as a leading analyst, in regard to practical therapy, technique, theory, and as a teacher. At the same time he took part in the socialist youth movement of Vienna and also established sex hygiene clinics. The experiences and impressions of this many-sided work-period caused him to expand and deepen Freud's psychological theories, particularly those relating to mass-psychology. Later this led to a break with the master of psychoanalysis and to the development of a theory and a technique of his own based upon new foundations; a development which resulted in the growth of all that is true and viable in psychoanalysis.

In 1930 Dr. Reich moved to Berlin and continued his work. He did mental hygiene work in various organizations and had a large following particularly among young Communists. Many of the older leaders were afraid that he would draw the interest of youth away from the class-struggle; and he was therefore expelled from the party. When the National-Socialists came to power, Dr. Reich had to flee Germany. He went first to Denmark, then to Sweden, but he did not receive a permit for permanent residence in either country. In the autumn of 1934 he went to Oslo, where he worked for a time with the Psychological Institute of the University of Oslo (Prof. Harald Schjelderup). In 1936, together with students from Norway, Denmark, and Germany, he established his own organization, the "International Institute for Sex-Economy." Since Reich's move to the United States, this organization has had its headquarters in New York.

The most important sources for the following exposition of sex-economy were all written by Dr. Reich. These books are: Die Funktion des Orgasmus (1927); Der Einbruch der Sexualmoral (1931); Die Massenpsychologie des Faschismus (1933); Der Sexuelle Kampf der Jugend (1932); Charakter-Analyse (1933); Psychischer Kontakt und vegetative Strömung (1935); Die Sexualität im Kulturkampf (1936), Experimentelle Ergebnisse über die elektrische Funktion von Sexualität und Angst (1937); Orgasmusreflex, Muskelhaltung und Körperausdruck (1937); Die Bione (1938); and many articles in the *Internat. Zeitschr. f. Psychoanalyse* and the *Zeitschr. f. polit. Psychologie und Sexualökonomie*.

Besides these printed sources, I have

† Translated by Marika Myerson.

* This is a pseudonym. Present conditions force us, unfortunately, to withhold the names of our European co-workers.

used the knowledge I gained from Dr. Reich during the several years I spent with him in my training and as co-worker in his technical seminar for character-analysis and vegetotherapy. Finally, I have used personal experiences, both those I myself have gone through, and the observations made during 12 years of therapeutic work with patients. This work began with about 8 years of psychoanalytic technique; then I changed to the technique developed by Dr. Reich, which is called character-analytic vegetotherapy.

First, a few words about the term "sex-economy." Like many other scientific terms it is a combination of Greek and Latin—Latin: *sexualis*, meaning sexual; and Greek: *oikonomia*, meaning management, or economy. Accordingly, the term means "the teaching and study of the use of sexual energy." In the following, I hope to make clear how such a teaching and study came to be a theory of living functioning.

As the name makes clear, the new theory springs from a study of sexuality. All modern research in the field of sex, which does not solely concern itself with the biological, anatomical and physiological manifestations of sexuality, but also considers the psychological and social aspects, is based on Sigmund Freud's basic work. This is true even of sex-economy, and therefore it is necessary to briefly review some of the most important phases of the development of Freud's theory of sex.

It was his work with the neuroses, primarily with hysteria, that first drew Freud's attention and interest to sexual problems. His study of the psychoneuroses, i.e., those neuroses having a primarily psychic basis and psychic symptoms, forced him to conclude that these neuroses originated in sexual impulses or memories which had been inhibited. Originally Freud used the word "sexual" in the meaning it had at that time: simply, that which had to do with sex life, the sexual organs, and procreation. At that time he believed that the psychoneuroses were caused by sexual experiences, mostly in childhood, which the patient later forgot, pushed out of his consciousness, or *repressed*. Freud had seen such inhibited memories and emotions become conscious during hypnosis. But Freud stopped using hypnosis for reasons which it is not necessary to explain here. Instead, he worked out another method, which he called the *psychoanalytic*, for making the inhibited emotions and memories conscious again. Primarily, this method seeks to make the patient say everything that comes to his mind: free association, it is called. The material thus revealed, together with the patient's dreams, is thereupon interpreted by the analyst. The purpose of psychoanalysis was—and still is—to make the unconscious, particularly the inhibited feelings, conscious, so that the conscious mind can make its decision, agreeing with or rejecting the material thus revealed, and in this way ridding itself of the neurosis. This process is often accompanied by emotional outbursts, and this more than anything else caused the psychoanalytic method to be called a method of abreacting. It is not necessary to discuss this further. I merely wish to point out that it was through this method that Freud discovered infantile sexuality and the fundamental role it plays in the lives of neurotic as well as healthy people.

The unconscious emotional life discovered by Freud through his new method was filled with sexuality, or, as he later discovered, with sexuality and aggression. I shall leave the question of aggression alone and discuss here only sexuality. Each step in analysis revealed sexual impulses, wishes, and fantasies, clearly connected with childhood memories and childhood situations. Freud's first conclusion was that these wishes and impulses originated in actual sexual experiences that had occurred during childhood, but a closer scrutiny of

a series of cases revealed that the acts Freud had under consideration had never been fulfilled except in the fantasy of the patient, i.e., they constituted wish-fulfillment. In other words, desires and fantasies had played the role which Freud first attributed to actual sexual experiences. Certainly in many cases there were also sexual experiences *per se*, in that the child had either participated in sexual acts and as a result had come up against interference from adults; or adults had made the child a party to sexual acts of which he was later ashamed and which he tried to forget; or else the child had witnessed the sexual act among adults with a resulting emotion which it was unable to control. As soon as Freud discovered these facts, he enlarged his concept of sexuality to include not only sexual acts, but all other sexual impulses as well, including wishes and fantasies. Thus the origin of a neurosis must be sought in the suppression and inhibition of all kinds of sexual impulses and fantasies in the wider meaning of the word.

Soon it became clear that the concept of sexuality had to be widened even more. Analysis showed that much of the material which undoubtedly originated in childhood had to be classified as perversions or sexual aberrations in adult life. Sexual sensations and impulses are felt not only in the sexual organs but in many other parts of the body, particularly in the mouth, the anal and urethral openings, and in the breasts; in many cases also in other parts of the body, such as the feces, the throat, nose, a foot, or a toe, to name examples from my own practice. Sexual sensations can also occur during certain acts which seemingly have nothing to do with sexuality, as for example during a fist fight, in exhibitionism, and curiosity about what other people do when they think they are alone (Peeping Toms), also putting out or looking at a fire, again examples taken from my own practice. All these acts are felt immediately as sexual by the patient in question, or else as improper, wicked, which for most people is synonymous with sex. These acts have in common the fact that under certain circumstances they lead to a sexual release: ejaculation in men, a more or less recognizable orgasm in women. Freud had no doubt but that all these manifestations should be included in the concept of sexuality, and psychoanalytic literature has ever since used the expression in this wider sense.

Freud's continued research soon led him to discover that the sexual aberrations or perversions named above, or some of them, are present in all children, and that they continue until a certain age. The child, he stated, is polymorphously perverse, from the point of view of the adult. On the basis of this research he laid down his basic theory of sex, in his famous and bitterly contested work, *Drei Abhandlungen zur Sexualtheorie*. In this work he shows the development of the sexual impulse from birth to maturity—the first presentation of this development in history. The three most important stages of development he termed the oral, anal-sadistic, and genital or phallic stage. The child remains in the last-named stage until the age of 5 to 6; then comes a period of some years during which sex seems to play a lesser part, at least in the conscious emotional life. After this so-called latency period, sexuality awakens to new life during prepuberty. There follows a period of seeking and difficulties during the years of puberty, until the sexual life reaches its mature form, characterized by sexual relations with a person of the opposite sex. I cannot here go into detail about this development or about the numerous abnormal deviations found in the various stages of development, or their various reasons. I wish only to stress four points which play an important part both in Freud's theory of sex and of the neuroses,

and in the later development of these theories.

1. By far the greatest number of pathological sexual developments are the result of encroachments by parents, families, teachers. These aberrations form the basis for neuroses, which therefore have their origin in a conflict between biological impulse and social environment—or, as popularly expressed: neuroses are due to sexual inhibition.

2. Freud regarded the various sexual aberrations as special impulses. These "partial impulses" were of a manifold nature. Together they formed the sum-total of sexual energy, libido, as Freud called it, so that when one partial impulse became strong, the result was a corresponding weakening of the others.

3. Freud showed that a part of the sexual energy, of the libido, could be transferred from sexual objects to others that were not sexual. If these objects were useful to society, or at least accepted by society, Freud called this shift of energy *sublimation*. The name alone implies a depreciation of sexual objects compared with others. Freud also came to believe that there existed a certain conflict between sublimation and sexual satisfaction, between free sexuality and culture. Sex-economy holds another view for reasons explained below.

4. Freud demonstrated the sexual attachment existing between parents and children, which he called the Oedipus complex. I do not wish to touch here upon the outcry and persecution which resulted for Freud and psychoanalysis because of this teaching of the Oedipus complex. Neither do I wish to bring out the reasons for placing certain limits upon this theory. I only wish to emphasize Freud's demonstration that the Oedipus complex is at first unitary, both "tender" and "sensual" at the same time, as Freud put it. This relationship between parents and children becomes, because of sexual restrictions, threats, and cries of "shame," split in two parts, one tender, the other sensual. The sensual element often becomes completely suppressed at an early age, while the tender, at least for a while, remains conscious. But the suppression of the sensual side often carries with it such anger and bitterness that even the tender side disappears and the only conscious feelings remaining between children and parents are those of indifference, or of hatred and enmity. In any case, the usual antisexual upbringing leads to a split in the emotional life between love on the one side and sensual desire on the other, between eros and sexus, as it has been called. In its extreme form this split often causes a person to be impotent with a mate he really loves, while he is unable to feel love for a partner to whom he is drawn by sexual desire. It can be expressed thus: "I would not be so wicked as to desire to sleep with the girl I love." This split also lies at the root of many speculations about eroticism and sexuality.

Psychoanalysis worked along on this theoretical basis during a quarter of a century, from about 1900 to about 1925. During this period many minor discoveries of detailed nature were made, resulting in certain corrections of the theory and in a certain development, but nothing of a basic nature came to light. The most important was perhaps the discovery of the "instinctual basis" of certain isolated character traits, and of certain neurotic symptoms and inhibitions. Two fields of research occupied the psychoanalysts: the therapy of the neuroses, practical and theoretical; and the study of cultural life in the light of psychoanalysis—ethnography, history, art, literature, religion, and science. In this field there was a great deal of careful research, which we cannot take up here.

The new ingredient in the theory of sex which was discovered later, had, like all other important discoveries in analytical psychology, its root first of all in clinical

work, and, in addition, in pedagogy and social work based on psychology. The new discovery was Wilhelm Reich's orgasm theory, brought out around 1925. This theory was based on certain clinical experiences which at that time had awakened a general interest in the field of psychoanalysis. These experiences consisted of the cases of failure in psychoanalysis among patients, both those that psychoanalysis was unable to affect and those who appeared improved by treatment, but very soon, for unknown reasons, relapsed into their old neurosis or developed a new one instead. It was the study of these cases that caused Freud to add to his theory of sex the theory of the death instinct and which caused Reich to build a new theory based upon Freud's original theory, which at the same time made Freud's theory more unified and consistent.

Freud based his new death instinct theory upon a particular type of patient whom he was unable to cure or affect, i.e., one who showed what he called "a negative therapeutic reaction." Such a patient reacted to each step of the analysis, each new discovery or correct analysis of his problem, even when he felt that it was a correct analysis, by an aggravation of his neurosis. Freud believed that what he had succeeded in freeing in such a patient was a desire which he had hitherto neglected: the desire for destruction or death. This desire, he believed, belonged to the natural instincts with which each man is endowed at birth, but usually was so hidden among the various expressions of sexual desire that it had not been noticed before; it merely gave to the other desires a special, aggressive tone. But in certain cases, which Freud tried to clarify, this fusion of desires became separated (*"Trieb-Entmischung"*) and then it might happen that the death instinct became the strongest. This death instinct theory of Freud's was never generally accepted, for both theoretical and practical reasons which I cannot go into here. I cannot speak for the present attitude of the International Psychoanalytical Association.

Reich took a different path. He gathered all the case material he could find of both successful cases and failures, those who had more or less finished their analysis with and without relapses, those who had remained cured, and those who remained hopelessly ill. He thereupon discovered that the successful cases were those who had succeeded in establishing and maintaining a satisfactory sex life, which the relapsed cases and the failures had not done. His next step was to try to discover what a satisfactory sex life consisted of and what role it plays in life. The result of this research was his orgasm theory, first described in Die Funktion des Orgasmus, published in 1927. This orgasm theory is the basis of sex-economy, and I wish to describe it in more detail.

The genital sex life had hitherto been the stepchild in psychoanalytic research, in any case as far as adult genitality went; the situation was a little better in regard to children. Sex life was regarded as a step in a person's development like any other step, with the difference that it was normally the ultimate step and that it led to procreation. How genital sex life differs from other forms of sexuality, how it expresses itself among the ill and among the healthy, aside from such gross disturbances as impotence or frigidity, what role it plays both in itself and in relation to other expressions of sexual desire—these questions had been seldom, if at all, the subject of research.

The first thing Reich needed to clarify was the nature of a satisfactory sex life. He asked a number of people, who seemed to have a satisfactory sex life, and a comparison of their answers showed that the sexual act is not fully satisfactory unless it follows a certain living development: the act begins with a spontaneous excita-

tion, which grows, first slowly and later more quickly during the preliminary caresses and the first stage of coitus. During this stage the movements are voluntary and to a certain degree it is possible to control the growth of excitation through control of these actions. When this stage reaches a certain point there is a sudden rise in excitation, the movements become automatic, consciousness is concentrated entirely on the perception of the pleasure sensations until the highest point is reached, the orgasm, with a moment of unconsciousness. After that, the excitation subsides rapidly, consciousness returns, and a stage of tranquil happiness intervenes, a sensation of contentment and peace, which slowly changes to a desire for sleep, work, or play. The ability to experience this kind of a sexual act was found by Reich only in persons free from neurotic symptoms or inhibitions. He called this ability *orgastic potency*. In this way orgastic potency became the indication of freedom from neurosis and thereby the goal of the therapy of neuroses.

Before I continue I should like to emphasize that it is on the basis of these clinical experiences, continually corroborated, that Reich and sex-economy lay such great stress upon orgastic potency, and not on the basis of more or less theoretical speculations. I wish to repeat what these experiences have shown: that all persons, who have themselves experienced the sort of sex act which I have just described, agree that it is more satisfying than any other form of sexual activity, and that the capacity for experiencing this act, called "orgastic potency," is found only in persons without neuroses, and that hitherto we have not found any case of freedom from neurosis without orgastic potency.

After having determined what an adequate, completely satisfying sex act is and that no neurotic person is capable of attaining this satisfaction, Reich investigated the various forms of emotional disturbance of the capacity for orgasm and found reason to believe that each type of neurosis has its own form of disturbance of the orgastic potency. I cannot here further describe that investigation. Instead I wish to describe Reich's general discussion of how neuroses are formed at all, in what way and why they always are accompanied by disturbances of the genital function and a lowering of orgastic potency; also the question of the source of energy of the neuroses.

Reich proceeded from the difference Freud had shown to exist between "actual neuroses" and "psychoneuroses." Actual neuroses Freud called such as seemed to have their origin in a present-day disturbance in sex life, particularly coitus interruptus, conflicts about masturbation, or sexual continence, and which ceased when the sexual disturbance was corrected. Freud believed, at first, that the sexual disturbance in these cases caused an accumulation of "sexual substances" as he named this supposed state of the body. When the patient succeeded in having a normal sex life, this accumulation ceased, and the neurosis was cured. Since this type of neurosis had a present-day causation, i.e., the sexual disturbance, he called it actual neurosis.

The psychoneurosis, on the other hand, has its origin in unconscious, inhibited impulses, wishes, and memories, which go back to the patient's childhood; conflicts which were never solved, but pushed aside and repressed. Freud also discovered with the passage of the years that the difference between actual neuroses and psychoneuroses is not absolute; closer study reveals that behind each actual neurosis there lies hidden something of a psychoneurotic nature, and on the other hand, that each psychoneurosis has an "actual-neurotic core."

Reich, as I have stated, proceeded from the difference between the two. He showed that the symptoms in an actual neurosis

chiefly are anxiety and a series of vasomotor reactions: palpitation of the heart or other disturbances in the action of the heart, perspiration, feelings of hot and cold, shakiness, dizziness, diarrhea, often a dry throat, or an excessive amount of saliva.

Note that the origin of actual neurosis is a disturbance of the sex life, i.e., a sex life with excitation but without adequate release. According to Freud's theory, there occurred damming-up of "sexual substances." Reich called this a stasis of sexual energy. The lack of an adequate release was found always to result in anxiety and the physiological symptoms which often accompany anxiety. On the other hand, a patient with actual neurosis loses his anxiety and the accompanying symptoms as soon as he obtains sexual release. Actual neuroses thus clearly demonstrate an antithetical relationship between sexuality and anxiety.

This relationship shows itself in other ways as well. During treatment of other neuroses, one sees that each time the patient gives up a neurotic symptom, he develops anxiety. It is clear that the function of the various symptoms is to diminish or "bind" the anxiety. When the symptom is given up the anxiety is released so that the patient experiences it fully. Whenever it is possible to discover how a neurosis started, it is shown that it began with anxiety. This is what we mean when we say that each psychoneurosis has an actual-neurotic core. The actual neurosis which in this way appears during the treatment of each psychoneurosis vanishes when the patient achieves a satisfactory genital sex life with orgastic release.

The discussions of his own clinical experiences and those of other analysts confronted Reich with a new series of problems, which he was the first to formulate and examine and try to solve. I therefore wish to give a brief review of the most important of these, in approximately chronological order in which they occurred in Reich's work.

The first of these problems was the psychological one, What is the function or functions of genital sexuality, and particularly of the genital orgasm? Until then psychologists, physicians and biologists, not to mention moralists and philosophers, had written and spoken about the sexual life of the individual as if it had no other function than that of procreation. Many of them well knew that the strongest feelings of pleasure are tied up with the sexual act, and that it is in great measure to achieve these that people and animals seek mates. But they regarded this desire lightly; it was primarily a bait created by nature in order to make people and animals accept the burden of bringing up their young. A person who took life seriously and wished to raise himself above the level of the animal ought not to seek his happiness in the satisfaction of his low, animal desires, but ought instead to do his duty—and for some people this meant bringing children into the world and taking care of them. The psychologists were unable to get away from the fact that some people became extremely unhappy when they were forced to give up their sexual desires, and both physicians and laymen could not close their eyes to the relationship that seemed to exist in these cases between an unsatisfactory sexual life and certain illnesses. But these were facts which science preferred to leave to poets, moralists and theologians to fight about as best they could. A storm of indignation arose, among physicians and psychologists as well as among churchmen and moralists, when Freud declared that the origin of neuroses was to be found in the suppression of sexual desires, or in wrongly directed sexual desires. In addition, Freud believed that it was necessary not only to make the sexual desires conscious, but also to satisfy them, as long as nothing stood in the way and the satisfaction of them did not take

away energy from cultural work. If there were hindrances in the way of satisfaction of one's sexual desires, one could do one of two things: deny them and fight against them without repression; or sublimate them, giving them a non-sexual goal accepted or at least tolerated by society. Because of this idea of the denial and "sublimation" of sexual desires, the opposition to Freud's teachings became less violent, so that not only psychologists who did not practice psychoanalysis, but even moralists and churchmen, were able to find something valuable in Freud's theories. Everything was on the way to an ideal state of affairs.

But at this point Reich came on the scene and disturbed this idyllic state of affairs with his orgasm theory. This theory states that if a person is to remain healthy, i.e., free from neurotic symptoms and inhibitions, he must have a satisfactory sexual life with adequate release of sexual excitation, which means, for a mature person, sexual intercourse with someone of the opposite sex, with complete orgasm. (How children achieve release is not yet clear; possibly in the beginning through being suckled and sucking their fingers, toys, etc.; and later, from the age of 3-4, through masturbation to which they can give themselves wholly and thus experience pleasure.) If one accepts this theory—and it is confirmed by all clinical experience—it is clear that the sexual life has quite a different function besides procreation, i.e., it regulates the excitations of the psychophysical organism; it regulates the energy household, the sexual economy, of the organism. The neuroses—inhibitions as well as neurotic symptoms—are therefore the result of a disturbed energy household in the organism.

What sort of energy are we dealing with here? Psychoanalysis gave this energy of the sexual desire the name of libido, which really means "desire." But that which we experience psychologically as desire and pleasure, must also find expression organically, biologically. As far as sexual pleasure goes, it can occur on any sensitive spot on the body. Biologically, feelings of desire and pleasure are tied to the vegetative nervous system, which is functionally and partly even anatomically, divided in two parts, the parasympathetic (vagus) and the sympathetic system. Feelings which are psychologically libidinous, are biologically vegetative.

The clinical experiences I mentioned above show that when sexual desire is hindered and is not permitted to attain its goal, a state of anxiety occurs (which later may be bound to or exchanged for, various neurotic symptoms). The physiological expression of sexual desire is a preponderant innervation of the parasympathetic (vagotonia) which shows itself in fresh, ruddy color of face and body; the skin is smooth and warm, without perspiration, the eyes clear, there is ample secretion of saliva, heart and pulse are normal, the sphincter muscles of the bladder and anus are relaxed, an increased secretion of the sex glands is evident, the sexual organs are warm and filled with blood. The physiological expression of anxiety, on the other hand, is a preponderant innervation of the sympathetic (sympatheticotonia); pale, cold skin with cold sweat, goose pimples on the body, a dry mouth, the eyes wide-open, pupils large, pulse fast, palpitation of the heart, spasm of the sphincter muscles of the bladder and anus, the sexual organs dry and wrinkled. Pleasure sensations, even if not of a consciously sexual character, have, nevertheless, the same physiological expressions, even though not as outspoken. This points to a basic identity of sexuality and pleasure. A wealth of psychological experiences points to the same conclusion: one can see this in children, but also among adults, during analysis. Children who have been prohibited from their early years, or very strongly, from seeking pleasure, even in non-sexual activities, feel a kind of prohibition against all kinds of desire. If this inner prohibition is not removed, they will grow up into adults with a diminished capacity both for seeking and experiencing pleasure, sexually and in other ways; for example, in their work. Many adults who begin to experience natural pleasure during treatment, for example in the deep breathing, feel at first that this pleasure is something forbidden (that is to say, sexual) in spite of the fact that in thinking about it they cannot find anything terrible in it. Thus Reich arrived at the conclusion that sexuality and the function of pleasure are fundamentally the same, and that the opposite of sexuality, both physiologically and psychologically, is anxiety. This antithesis he called the *basic antithesis of vegetative life*.

Physiologically, it can be shown that in vagotonic reaction the blood flows towards the periphery of the body, the skin. Psychically this is felt as a turning outward of one's interest: one wants to do something or to come into contact with other people. If this desire meets any opposition—and this happens practically always, if only the opposition of inertia—the flow towards the periphery is dammed in several places, creating a local sympatheticotonic reaction with an increased inner tension. With the help of this tension the opposition is overcome, or else the dammed-up stream of energy is released in movements. As the energy is used up a new vagotonic reaction occurs, and the same process is repeated, so that it is possible to say that normal, free, vegetative activity consists of a rhythmic alternation between the parasympathetic and sympathetic functions.

But the regular, everyday change between the parasympathetic and sympathetic functions does not give release to the whole vegetative energy. At longer or shorter intervals there seems to be a gathering of energy, which seeks release through a discharge of both parasympathetic and sympathetic, a discharge in which the complete psychophysical organism is involved. Such discharges occur on the one hand through sexual orgasm; on the other hand through feats of strength or work which demand all one's energies. In the first case the vagotonic reaction, the experience of pleasure, is uppermost, but even the sympatheticotonic reaction is seen in the strong feelings of excitation and need for release. In the second case the feeling of striving, of putting one's strength to the test, of suspense (i.e., sympatheticotonic reaction) is the strongest, while the vagotonic reaction is felt here as the accompanying pleasure and satisfaction of having used one's energies well. In both experiences is felt, when the highest pitch is reached, an element of risk, of danger, of anxiety, in the midst of pleasure. Isolated, this element can become a desire for anxiety, a sense of daring, of adventurousness; or, in a negative sense, it can become pleasure anxiety.

Clinical experience shows that these two kinds of experience always go together, so that in the same degree that a person has the capacity for work (in the sense of wholly giving himself to it, of concentrating upon it), he also has the capacity for experiencing the sexual orgasm completely. This was to be expected, considering the close relationship of the two parts of the vegetative nervous system, the vagic and the sympathetic. If the vagotonic functions are free and capable of release, the sympathetic ones must be the same, and vice versa. This point of view has shown itself very valuable in clinical work. Often our patients declare that nothing is wrong with their sexual potency, but they are dissatisfied with their work or with their way of life in other ways. When we have discovered enough about what is wrong with their work or their methods of living and working, it is possible as a rule to discover a certain disturbance of the sexual function. From my own experience with

patients, I may say that a further examination of the sex life of such patients has always proved me right. On the other hand it happens that persons who are extremely satisfied with their capacity for work and with life in general, come for treatment because of diminished sexual potency. In such cases closer examination of the sexual disturbance makes it possible to point out corresponding disturbances in the working capacity, of which the patient had been unaware. In this way we are also able to decide when a treatment is successfully finished. In order to be considered finished, we must find in the patient complete orgastic potency, complete capacity for concentration in work, and, I should like to add, a certain spirit of enterprise and daring. The first two abilities are not found, at least not for long periods, except in persons who have a satisfying sexual life; in regard to the third characteristic, it is common, among persons without orgastic potency, to find it taking up either an unreasonably large or an unreasonably small place in their lives. Such persons are usually extremely daring, i.e., wild speculators, proposers of grand projects or hypotheses, or else they are lacking in initiative and are overcautious.

To the question, "What is the function of the genital sexual life?"—we can therefore answer: It is the only complete regulator of the vegetative and therefore of the psychic energy tensions. The capacity for genital sexual experience, that is, orgastic potency, is identical with the capacity for a maximal and concentrated working ability and with courage to meet the difficulties which life brings.

At the same time as he reached this psychological result, Reich was faced with a series of new problems. The first was the therapeutic problem: how to help patients to overcome the inner difficulties which impede a satisfying sexual life and destroy their natural orgastic potency? Since a disturbance of the sexual life is identical with a disturbance of the vegetative functions, the first thing was to discover how these functions became disturbed and broken. Since Reich had approached the problem from a psychoanalytic point of view it was natural for him to begin with the emotional causes. Even psychoanalysis had shown that the origin of the difficulties was not to be found in the neurotic symptoms, which instead were really attempts to solve or flee from the difficulties, usually by giving satisfaction to certain inhibited desires and thus camouflaging these desires so that they were unrecognizable. One concrete example: a patient suffering from a compulsive desire to stare at everything that looked the least bit different, was proved to experience during staring an immediate feeling of pleasure, although weak and of short duration, of the same kind experienced by the patient during secret masturbation. Sometimes this compulsive desire to stare camouflaged the visual fantasies which had accompanied the masturbation. Like all such symptoms, it gave little satisfaction and was a great deal of trouble. Obviously it was not a good solution to the conflict between masturbation and the desire to stare on the one hand, and the normal inhibitions on the other; but it saved the patient from experiencing and acknowledging desires which he believed were sinful and shameful. This is, in the main, the function of all neurotic symptoms and inhibitions. At an early date Freud had shown that the origin of both symptoms and inhibitions lay in such conflicts, and he believed at first that if the conflict and the meaning of the symptom were made conscious, the symptom would vanish. In some cases this was true, but not for the majority. Usually there was a strong resistance to giving up the unconscious desires and even more to acknowledging them and experiencing them, even when the analyst was able to explain their

content. In this way it became necessary to first analyze the resistance, and Freud laid down various principles for this "analysis of resistances"--principles which in practice were seldom or never followed before Reich developed the technique of consistent resistance analysis. After awhile it became apparent that not even "resistance-analysis" could succeed with the great majority of neuroses, because the resistance stemmed not only from conscious or unconscious desires and affects, but from the very character of the patient; and here analysis did not get any further, at least in the majority of cases. It was here that Reich's great pioneering work in the therapeutic field set in.

Reich was the first psychoanalyst to take up the problem of character for general discussion. Earlier, much good work had been done to clarify the instinctual basis of certain isolated characteristics, particularly by Freud, Abraham, and Jones. But no one had considered character as a whole, the question of which character traits go together and why, the whole structure of character; and least of all had anyone considered the *function* of the character. In spite of the fact that analysts had seen various isolated characteristics grow in the soil of certain drives and under certain given circumstances, it seemed to be taken for granted that once a certain character trait existed in a patient, there was nothing to be done about it except to make the best of it. To be sure, it sometimes happened that one or more character traits changed during treatment, but this was regarded as accidental, as occurring by chance. The usual procedure was that, when during analysis it had been discovered that the patient had a particular tendency, that a particular partial impulse had "become part of the character," there remained nothing else for the patient to do about it than to continue living with his personality as best he could.

Here Reich made his first basic therapeutic advance. Taking the central function of sexuality, and particularly the orgasm, as a point of departure, he asked himself: what role do the different characters play in relation to this function? All types of character have in common that they make it possible for the individual to protect himself from stimuli that are too painful, so that they may be held at a distance until there is time and opportunity to react in a more convenient manner and not blindly. It is a truism that most of the more or less useful methods of reacting have a tendency to become habits, which easily become unconscious and hinder a person from reacting thereafter in the manner which would, under the circumstances, actually be the most useful. When Reich began to compare the different characters and their effect on the function of the orgasm, he soon saw that they fell into two main groups: those who had the capacity for orgastic potency, and those who did not. He named the first group the *genital character;* and the second, the *neurotic character*. I cannot take the space here to give a detailed description of the two groups, but I wish to say a few words regarding the difference between them.

The genital character enjoys a sexual life that has attained full flowering, so that all sexual desires are gathered into the one heterosexual desire to have intercourse with complete surrender, without any wish to torture or to be tortured, and without having the other partner—consciously or unconsciously—see in him whichever of the parents had been the love-object during childhood. Without exceptionally strong reasons this type of person does not tolerate living in celibacy; when he has a partner, to whom it is possible to give himself completely and without fear and who can receive fully, he will stay with this partner as long as the full relationship lasts.

In the neurotic character, on the other hand, the pregenital desires are so strong that they prevent a full genital orgasm, or

else the genital desires are so hedged about with prohibitions and guilt feelings that he finds it impossible to have a mature sex life, or if he has one, it is so inhibited that it does not give full satisfaction and release. This lack of complete release causes a feeling of emptiness and uselessness which we call inferiority feeling, and which is so common that there is a more or less general belief that a feeling of sadness or dissatisfaction is normal after intercourse ("post coitum omne animal triste"). If this feeling of inferiority, as often happens, leads a person to work hard, this will either become compulsive work out of duty, or else a seeking after power and honors rather than happiness. The genital character finds work a natural result of his desire for constantly increasing contact with other people and of a healthy participation with his fellowbeings in sorrow and joy. Since orgastic potency is identical with the ability to concentrate wholly upon an object or a piece of work, and since each neurosis brings with it a disturbance of this ability, it follows that for the genital character life and work is a realization of these natural tendencies, or a struggle for these goals; while work and life for the neurotic character becomes infiltrated with the struggle to hold down both the original, and even more, the secondary desires and tendencies. The varying forms of the neurotic character are varying ways of suppressing the desires or tendencies of which he is ashamed or which he regards as dangerous.

Using this knowledge of the role played by character, Reich began to look for a method of influencing and changing character. Bit by bit he worked out a new technique to attain his goal, the *character-analytic* technique. I will not go into detail about this technique but merely point out that he inaugurated, or rather builds upon two points of view which are related to the psychoanalytical viewpoint, and yet take an important step forward. While psychoanalysis seeks to make the unconscious desires conscious through free association and through analysis of unconscious desires and the resistance to them, character-analysis, on the one hand, attacks the character and makes the patient conscious of the *way* in which he acts in word and deed; and on the other hand the character-analyst encourages him not only to say what comes to his mind, but also to do it, within certain limits. The unconscious, which in this way is made conscious, is *experienced* in quite a different manner and with quite another sense of reality than most of the material brought out during free association and interpretation. This technique, as worked out by Reich, made evident that most characters consist of several layers, which are expressed and made conscious one after the other, until the patient himself feels that he has arrived at the manner of behavior natural for him. When the patient comes far enough along so that this behavior is stable, he also achieves orgastic potency—an achievement which naturally does not occur at once, but little by little, as the sexual elements of his behavior undergo treatment along with the other elements.

During treatments employing the character-analytic technique, Reich noticed that patients regularly experienced a series of bodily movements and sensations hitherto unknown to them; and with which the medical world had not concerned itself, although much of this had already been observed occasionally. No one had ever thought of doing anything about these movements. They began, as Reich noticed, often without the knowledge of the patient, and most often as jerking or pulling movements, many times reminding one of certain kinds of tics. Often they began locally, but spread further and further throughout the body. After a while it was possible to distinguish two kinds of movements: those that looked soft, free, organic,

and others, which were swifter, spasmodic or mechanical. When the soft, organic movements reached a certain stage before they were broken off by the other movements or by resistance, they were accompanied by "flowing" feelings in the body. Often these feelings began on the inside of the thighs, in the chest, stomach or the face. One condition for the development of both the free movements and the flowing feelings was more or less free, deep breathing by the patient. With these experiences as a basis, Reich began to study the relationship between deep breathing and spontaneous bodily movements, and at the same time the reason for the muscular spasms and mechanical or automatic movements which acted as a brake, or stopped altogether, the spontaneous movements and flowing sensations. He then discovered that as the spontaneous movements and flowing sensations increased, as the breathing became freer, as the patient had less muscular spasm and less mechanical, automatic movements, he understood much more clearly his difficulties and the reasons for them, and was able more and more to overcome them, in his work, sexuality and his manner of living in general.

This formed the basis for a new step forward in therapeutic technique and led to what Reich called character-analytic *vegetotherapy*. We will refer to the method only by the last-named word, vegetotherapy, but emphasize that we always mean character-analytic therapy and not an independent therapy which has little or nothing to do with character-analysis. Whether it will in the future be possible for the vegetotherapeutic technique to become independent of character-analysis and achieve cures of character faults solely by its own methods, is a question I do not wish to discuss here.

The point of departure for vegetotherapy as a special technique for treating neuroses and character difficulties was the discovery of what Reich has called the orgasm reflex. This discovery has been described by Reich in Orgasmusreflex, Muskelhaltung und Körperausdruck, Oslo, 1937. In a patient who clearly and quickly developed the spontaneous movements just discussed, these became little by little more and more unified, so that finally the whole body was involved. They then exhibited the form of wavelike movements over the whole body which grew in intensity until they became clonic movements, as in a free orgasm. It was this that Reich called the orgasm reflex. When he had seen this reflex in its fully developed form and remembered its development, he was struck by the fact that all the movements we have mentioned here as spontaneous movements, are parts of orgasm reflexes, and when they are given an opportunity to develop, are gathered together in this one reflex. During clinical treatment the development of the orgasm reflex goes hand in hand with the ability to overcome resistances in the character to the free impulses, and with the release of the muscular spasms of the body. Thus the achievement of the complete, free orgasm reflex can be regarded as the goal of the therapy of neuroses.

The new element in the therapeutic technique which Reich introduced after this discovery, was that he took particular notice of the spontaneous bodily movements and of that which acted as a brake upon them, or stopped them, or hindered them from developing. Something of these movements is found in each human being in connection with breathing and the action of the heart. The action of the heart is difficult to influence except by drugs, but breathing can be controlled by willpower. Further, it seems that changes in heart-rhythm are the result of other vegetative processes rather than the reason for the occurrence of these processes, while breathing is able to start, to act as a brake upon, or to stop altogether, many vegetative movements and sensations. If one ob-

serves the spontaneous breathing of a person, it is possible, with some experience, to quickly notice several places on the body where there is more or less muscular resistance, either constantly or at intervals, of which the person himself is often unaware. After gaining a certain experience, it is also possible to notice that many of these muscular resistances are part of a way of carrying the body, of an expression of the face, which bears witness to either a state of emotion or to a character trait. All this can be conscious, unconscious or only partly conscious, if it is possible to use such an expression.

The function of vegetotherapeutic treatment is that of freeing the spontaneous, vegetative movements. To achieve this, the patient must consciously experience both the constant and varying muscular spasms of his body, which hinder the spontaneous movements, as well as the spontaneous movements themselves as they occur. In other words, it is necessary to make him consciously experience what is happening in his own body, both what he himself does and what occurs spontaneously. The methods used are partly direct, partly indirect. Directly, the therapist tries to make the patient feel what is happening in his body, or make him conscious, for example, that he is lying with a muscular spasm in the throat or in the forehead. Indirectly, the therapist points out, perhaps, that for a long time the patient has not accepted a single thing that has been said, not even the most obvious facts, and in this way it may be possible to make the patient relax his stiff-necked attitude somewhat. A combination of the two methods occurs when the therapist first succeeds in making the patient experience and acknowledge a certain way of holding himself or a certain muscular spasm and then lets him discover by himself what lies behind all this; preferably also, discovering what particular expression this has had in his recent behavior. In working these things out there occur also, during most treatments, forgotten or half-forgotten memories, often clearly related to the muscular spasms, or to the facial or bodily expression. Some spasms, often in parts of the body which are difficult to observe or to reach from the outside, are made conscious through dreams. By utilizing the hints offered by dreams, it is often possible to get a patient to experience and to try to relax such spasms.

Each time the patient experiences a new sensation in this way, a new vegetative movement is released. This is true whether the new experience deals with present problems or those of the past; very often there is a combination of the two. When the vegetative movements have reached a certain strength or a certain inclusiveness, the patient experiences them, partly together with the flowing currents felt in the body, partly simply as such currents. These currents are often described by patients as waves of warmth, or a slight sucking or pulling of a clearly pleasurable nature. Patients who previously have had religious experiences express these sensations in religious terms, streams of grace, blessedness, joy and peace. Others, who are used to religious expressions but have not had any personal religious experiences, say that now they understand what it means to be blessed, or that they have had a "foretaste of heavenly bliss." The experiencing of these bodily currents gives the patients a greater feeling of security and new hope of becoming healthy.

As soon as the patient is able to experience and follow along with his vegetative movements, he is able to cooperate in the treatment in a different manner than before, by more and more being able to feel both how and why he puts the brake on his own vegetative movements, and in this way more consciously cooperating in the work of overcoming the hindrances, both bodily ones and those which stem from his character. As this work proceeds and succeeds, he sees more and more clearly both the outer difficulties and conflicts which have shaped his inhibitions and his neurosis, and also which inner and outer difficulties he must fight, if he wishes to become free and healthy once more. The complete experiencing of these difficulties sometimes causes him to lose courage and become so depressed that he is unable to see his way clear to overcoming them. If such depressions become too severe, before the patient has learned to give expression by word and action to his feelings, he may stop treatment without having improved noticeably, or even commit suicide in a fit of depression. It is especially important for him to become conscious, at an early stage, of his suppressed anger and learn to vent it; once he has learned how to do this, the danger of stopping treatment because of inner conflicts or the danger of suicide becomes small or nonexistent. It might be wise to point out in this connection, that these dangers, even the danger of suicide, exist in all neuroses, whether the patient is being treated or not. The fact that the patient becomes more and more conscious of the scope of his difficulties and how deeply imbedded they are, regularly causes the last stage of treatment to become the most difficult, both for the patient and the therapist. This is also true of psychoanalysis and character-analysis.

As the vegetative movements become released, the patient begins to feel more free in other ways; in particular, he begins to feel more alive. His capacity for living, for entering into activity, for giving himself to the present, grows tremendously, in regard to work, relations with other people, and sexual relations. His work, social life, and sexual experiences are freed from most of the restraints that previously impeded them, such as feelings of duty, compulsion, guilt, and rivalry for honors. They become natural functions to which he is able to devote himself freely and surrender himself to, in his own way and in his own time. Opposition no longer depresses or discourages him, but acts as a spur to greater efforts, to anger, if necessary, or, when the opposition is actually overpowering, to a seeking of new ways or new goals. He feels, in general, much more alive. This does not mean that he feels more satisfied or happier, sometimes quite the opposite: if circumstances make it impossible for him to keep on with his new way of life, he will suffer more deeply. On the other hand, he will give up trying to improve on a way of life that is impossible both for himself and those in his environment. For he who is vegetatively healthy has a much greater capacity for contact with others, for feeling with them, and thus he suffers if they suffer. It can be said that the capacity for suffering grows in about the same ratio as the capacity for happiness; this is what one would expect when one recalls that the suppression of the vegetative life, the inhibitions, originated as a protection against anxiety and suffering.

The vegetatively free person experiences all his own needs, desires and impulses in a different way and much more strongly than the person who is vegetatively inhibited, except for those special occasions, when the inhibited person's dammed-up impulses break out with unnatural strength. The vegetatively free person does not tolerate outer bonds and limitations which he finds unreasonable. And he longs to surround himself with free people, feels uncomfortable among superiors or coworkers who are unable to accept all that he has to give, or to give that which he needs. In a society based on inequality and oppression, he therefore becomes a revolutionary. He demands a social system that will permit free people to exist, and a system of education that will permit children to retain the natural, vegetative freedom which is theirs at birth. On the basis of Reich's findings, Paul Martin has drawn up the basic principles for sex-economic

pedagogy in a little book, "Upbringing for Living." It is impossible to give more than basic principles at the present time; the details will be filled in after observation of sex-economic education over a longer period of time.

The basic principle in sex-economic education is self-regulation. By this we mean that everything that is done with and for the child must consider his needs, as he feels them and shows them, so that the child will get a chance to have his needs satisfied, to realize his desires himself, naturally with reasonable consideration of the demands of the adults and the environment. The reason we insist upon self-regulation is that in practically each case we treat, the vegetative, and therefore also the neurotic inhibitions, can be traced to childhood prohibitions enforced by adults. Self-regulation must begin the moment the child enters the world, so that from the first day of its life it may decide for itself how much and how long it wishes to eat, when and how long it wishes to sleep or remain awake, when it wishes to move its bowels and urinate, and when it needs care. Naturally it takes time and thought for an adult to discover the child's desires, but by taking this time and thought it is soon possible to discover the child's own natural rhythm and then count upon it with much greater safety than upon any habit the child may have been forced to learn through outer pressure. Further, there is the question of initiative in the child, to help it to grow and make it independent and able to help itself, as soon as age and strength permit. Thirdly, the question, so difficult for parents of today: How much love and caresses shall I give my child? The answer, for us, is quite clear: as much as the child itself wishes to have, no more or less. If it receives less than it desires, it becomes unhappy and doubtful of its own personality and of those of the adults, and develops that sense of inferiority from which so many adults suffer. And if it receives more love than it desires, it becomes spoiled; stops doing anything for itself and at last feels that there is no joy in anything that is given to it, no matter how beautiful the gifts or the care showered upon it. The same is true of everything the child receives before it shows a desire for it; this undermines the basis for one of the most important prerequisites for a happy and successful life: the necessity for man to help himself as far as he can and to use all his talents to the utmost. Lastly, bringing up a child according to the principle of self-regulation will give parents and teachers more joy in the child than any other form of education, because this form of upbringing makes possible a wider and deeper contact between child and adults than can be had in any other way.

Practical sex-economic education has existed for only a short time, but there are some children who have lived with adults practicing the kind of upbringing I have briefly sketched. I cannot further describe how the principle of self-regulation works in the basic aspects of life, such as cleanliness, orderliness, play, and other facets of social life with children and adults, teaching and studies, work and the general development of methods of living; neither can I enter upon the role sexuality plays in the life of the child who is permitted to grow up under these conditions. I merely wish to state that those children I know, who have had this upbringing, are the healthiest, most natural, intelligent and lovable children I have ever seen.

When I described how it feels to experience vegetative movements and currents, I mentioned that people who earlier had had personal religious experiences or were used to religious expressions, often compared their vegetative feelings to their religious ones, or used religious words to describe vegetative feelings. These facts bring out the question: What role do these sensations play in the life of religious people and thereby in religion as a whole? The scientists of our time seem to accept the belief that religion is built upon religious experiences. This question has not as yet received more than preliminary consideration, in lesser works by Reich, Karl Teschitz and myself; that which I have to offer on the subject is therefore merely preliminary results, which I hope to be able to enlarge upon in another connection.

Religious experience has always been the central problem of the psychology of religion, ever since this branch of science was created at the end of the 19th century. As I have shown in an earlier work, we are dealing here with a psychological experience of a particular kind, forming the basis and the point of departure for all that is specifically religious in religion. This experience I have called ecstasy. I have shown under what circumstances it is able to cause, and indeed has caused, a religion to be born. I wish here to state merely that ecstasy in one form or another is an integral part of religious conversion which is the religious phenomenon most thoroughly studied by psychologists, and which is of prime interest, particularly for many Christian sects. This interest is strongest in the English and American sects, and it is among them that the best research on conversion has been done.

This research, which bases itself equally upon the descriptions of living persons and literary sources, shows that at least among these sects conversion is a phenomenon of puberty—using the word puberty in its socio-psychological meaning: the period from physical sexual maturity until an adult sex life is established. This fact makes it easier for us to understand the whole process of conversion, because it forces us to ask: What is there about this period of transition that makes youth particularly susceptible to such experiences? Examination of children and adults from the viewpoint of sex-economy and with the technique of vegetotherapy gives us the answer. It shows that small children, before they have had their natural tendencies crushed, exhibit, in all their movements, the free, soft and charming vegetative manner, found in adults only in exceptional cases, or after long treatment. It shows further, that this softness and healthy spontaneity diminishes and at last mostly disappears, as the child is forced to suppress its natural impulses and natural reactions through prohibitions placed upon it by adults. In the four-five-six-year-old groups this repression of vegetative health is particularly noticeable. From five and six years on many children exchange a great part of their natural liveliness and happiness for a more or less comfortable consciousness of what adults approve of or of their own ability to hold up their end among children of their own age. This process continues for some years, usually until puberty sets in. Then, with the maturing of the sexual organs, the suppressed desire for life and particularly for sexuality receives new strength. But since all avenues of release are more or less closed, this desire becomes dammed up; this process takes a great deal of energy and binds it so that the energy at the service of the conscious personality is weakened, with the result that the young persons feel powerless, without abilities, inferior and empty or unhappy. For many, it is as if life were worthless, or at least as if they themselves were unable to get from it the things that make life worth living. This feeling constitutes for many young people the so-called difficulties of puberty. These difficulties do not always coincide with physiological puberty, which consists of the maturing and differentiation of the sexual cells. But if we include psychological puberty, which lasts from the time before physiological puberty until the young person establishes an adult sexual life, we may say that practically all people in the civilized world today have their puberty problems.

During this period, when life seems evil

and unhappy, or deserted and empty, religion enters with its "joyful message" of another, better, richer, and more blessed life for all who wish to be converted and believe. I will not describe here the methods used by religion to achieve such conversions, nor the occasions when conversion and belief seem to come by themselves, without forewarning. I shall content myself with showing that conversion and belief actually do lead to, or bring with them, a new life, experienced by the converted person and by the believer with the strongest feelings he has ever known. This experience is felt by most as something quite new in their lives; only one or the other will remember a time far back in childhood, when they felt alive in a similar way. It must have been such a memory that created the biblical sayings, "Except ye become as little children, ye shall not enter into the kingdom of heaven," and, "This little child, the same is the greatest in the kingdom of heaven." This is because the new life which religion promises and gives to its believers is principally a reawakening, a break-through, of the spontaneously vegetative in life, with that joy in life that every healthy and unoppressed child has.

The scientific proof of this has not yet been established, and it is possible and even reasonable to expect that the results of my own experiences and examinations, which I have briefly described here, may look quite different after further experience and research. But I believe that everyone who has knowledge of both the therapy of the neuroses and the psychology of religion, will agree that these suggestions point to large and promising possibilities in the field of religious research.

It goes without saying that a psychological theory of emotional and bodily health as I have sketched it here, and in pedagogy and religion, must have serious consequences for our views on politics and society. There is as yet no sex-economic political organization, and we can hardly expect to have one until circumstances in the civilized world are such that practical efforts can be made to realize sex-economic principles on a larger scale. From the sex-economic viewpoint the chief goal of all political efforts must be to create a society and a way of living in which life, free, spontaneous, vegetative life, may develop as freely and as fully as possible; this is the only guarantee for a normal regulation of the sexual energy, or life energy. This requires that each person make his own decisions regarding his own body and be able to follow and put into practice his own desires, sexual and others, as long as he does not violate the desires of other people; society must provide the conditions of life necessary for this. Further, society must guarantee a form of education that will respect a child's natural needs and will give it opportunity to develop freely in natural social life with other free children and adults. And further, conditions of work must be arranged so that each person may wholly, or at least primarily, engage in the kind of work he likes, together with people he likes, so that work will no longer hamper and kill, but quite the opposite, will express the spontaneous will to a free life.

It is impossible to say today how society should be built to fulfill these needs, and neither is it possible to say how we are going to achieve such a society. What can be done today, is that all who consciously feel the spontaneous life in themselves and understand the difficulties and dangers threatening it in the society of today, should learn the laws of society, as it now functions, and together try to find out how best to work for a new, free, and natural way of life. This much we can say now: the work toward a new kind of society must consider the necessity of satisfying the natural human needs.

In yet another, actually the most important, field, sex-economic theories will soon propose new and decisive problems. I am referring to biology and the sciences connected with it, such as pathology, physiology and therapeutics.

Using as his starting point the clinical experiences in regard to the complete orgasm and the role it plays in releasing psychic and vegetative tensions, thereby acting as the regulator of psychophysical health, Reich undertook to discover what this orgasm really is from the viewpoint of biology and physiology. He arrived at the idea that the sensations felt during orgasm as sexual pleasure and excitation and which go with a vagotonia and the flow of blood and secretions to the periphery of the body, particularly to the sexual organs, really are a mechanical tension carrying with it a bio-electrical charge, which, when it reaches a certain degree, turns into bio-electrical discharge and mechanical relaxation. Experimenting with an oscillograph, he discovered that during sexual excitation there actually developed an increase in bio-electrical charge at the erogenous zones; on the other hand he found a decrease of this bio-electrical charge when the person submitting to the experiment experienced anxiety or unpleasure. As we mentioned before, feelings of pleasure are accompanied by an increased vagotonia, while anxiety and depression, on the other hand, go with an increased sympathetic-cotonia. Vagotonia is a flow towards the periphery of the body, a widening, while sympatheticotonia is a flowing inwards, a shrinking, with a decrease of surface excitation. There is found in all forms of life, a rhythmic exchange between flowing outward and flowing inward, from the simplest monocellular organisms to the highest metazoon, with the difference that in higher organisms this rhythm is tied to a vegetative nervous system with antithetical parasympathetic and sympathetic functions, while in lower organisms it is connected with the effects of certain chemical elements. These elements form two chief groups: one with vagus effects, the other with sympathetic effects. To the first group belongs potassium, choline and lecithin; to the second, calcium, adrenalin and cholesterin. We may name the two groups potassium and calcium groups.

In the light of these and many other related facts, the formula which Reich earlier had stated for the function of the orgasm, tension → charge → discharge → relaxation, came to have a much wider interpretation. Since the rhythmic alteration which is expressed in this formula exists in all living organisms, Reich asked himself if perhaps he had not discovered the formula for living functioning itself. He immediately began experiments to try to find the answer. The first to be successful were his "bion" experiments.

These experiments were based on the consideration that if the orgasm formula is also the formula for living functioning, it should be possible to derive life from lifeless matter, if the material is mixed so that it has the same combination as living matter, and under such circumstances that it is possible to achieve the rhythm expressed in the formula. Reich mixed various sterile substances under the conditions named above; thereupon he found that in and from some of these combinations, life developed; under the microscope one could observe the same movements found in living monocellular organisms. Certain parts of the preparation organized themselves into cells with nuclei and protoplasm, and when they were placed in sterile solutions of the kind usually used for bacterial cultures, they propagated and changed more and more of the medium into living matter. In order to rule out infection through the air, the French researcher Roger du Teil created a method of both sterilizing and mixing the cultures in air-tight tubes which made infection impossible; the result was the same. The bion experiments were attacked by the press of Norway, particularly in the spring and

summer of 1938. These attacks were based chiefly on ignorance of the experiments: not one of the critics had tried to master Reich's experimental technique or had himself repeated one single experiment.

As for myself, I am not familiar enough with biological and bacteriologic methods to be able to present more than a layman's conviction, based upon my knowledge of Reich, his writings, and those of his experiments which I have observed. I shall therefore not say anything more about the controversies regarding the bion experiments, but merely try to give a brief résumé of the theories and experiments Reich has developed since.

I stated that in his bion experiments Reich used, among other things, the sterilized remains of lifeless organisms. The living matter created during the experiment was quite different from the organism from which the sterilized matter had first been obtained. In other words, an organism can die and afterwards result in a new kind of spontaneous living matter. Reich connected this fact with an idea which various pathologists had briefly mentioned before: that the living matter causing certain illnesses, such as tuberculosis and cancer, might have originated through spontaneous generation[1] in dead or disintegrated body tissues. Reich believed that if such were the case, it must be possible to find tiny living particles in, for example, cancerous tissue, of the same size and organization as the bions which he had discovered. He examined such tissues, and the examination showed he was right: he discovered tiny living particles which had not been seen earlier and even found it possible to cultivate them in the same kind of cultures used for the bions. He also tried to combine them with bions, and then it appeared that some of the bions were stronger than others and destroyed the tiny living organisms. During the past few years—since the autumn of 1939 in the United States—Reich has continued these experiments, partly in collaboration with American researchers. The details of this work have not yet arrived in this country, but we know enough to dare hope for important results for both cancer research and cancer therapy.

During his bion experiments, Reich observed certain phenomena which he was unable to explain other than as an unknown radiation from the bions. It seems that people who are vegetatively free radiate energy, not only figuratively speaking, or psychically, but physically. What importance this fact may have for our consideration of and our use of the vegetative energy, it is impossible to say. I will merely mention that many experiments with this energy are now going on in various countries.

I have here tried to describe the development of that branch of research called sex-economy by its founder, Wilhelm Reich, from its beginnings as a clinical theory of the neuroses until it became a theory of the function of the energy of life itself. It began by showing what sexuality means to emotional and to bodily health, thereby laying the basis for the theory of the regulation of the sexual energy (sex-economy). This teaching created a series of new problems and research goals for therapy, pedagogy, the science of religion, sociology and politics and presented new problems for biology, general and special pathology, and finally, for biophysics. The name of sex-economy was retained even in these new, ever-widening fields, although the theory itself may seem to contain much more than this word indicates. Nevertheless there are many good reasons for keeping the old name. First, the historical reason: it was the study of sexuality which was the point of departure and the basis

[1] *Editor's note:* The term "spontaneous generation" is misleading. As ordinarily used, it means something like the development of frogs from rags. For this reason, orgone biophysics uses the term "natural organization."—*T.P.W.*

for the theory. Further, the fact that up until now the experiments have all made it clear that the sexual energy—libido, in psychoanalytic language—is nothing but the life energy itself. It can perhaps be explained in another way: there is no special "sexual energy"; "sexual energy," in a more limited sense, is really life-energy directed toward a sexual object. Sexual energy is therefore not just a part of the life-energy, sexuality is a function of the life-energy as a whole, so that when sexuality is free, the life-energy is also free in the same degree. If sexuality is more or less suppressed, the life-energy as a whole becomes suppressed in the same degree. This concept is such an integral part of our whole theory, and plays such a definitive role in those fields of research the sex-economists have entered upon, that it is reasonable to find it reflected in the name of the theory itself. Finally the name expresses our desire to bring into the light of day and to an honored place, that which unhappily for the world has been most dishonored, condemned and suppressed: sexuality—the basic human desire for happiness and joy in our own bodies and in our fellow-beings.

FROM THE HISTORY OF SEX-ECONOMY

THE MASOCHISTIC CHARACTER*

From Wilhelm Reich's book CHARAKTER-ANALYSE (1933)

Editor's Note: There are several reasons for publishing this chapter from Reich's CHARAKTER-ANALYSE at this time.

First, there has been, in recent years, an increasing interest in this book and increasing demands for an English translation of it, particularly from psychoanalysts. Unfortunately, it has not been possible thus far to translate and publish the book. The publication of selected chapters in this JOURNAL may meet these recurring demands, at least in part.

Second, it is a good thing from time to time to go back and point out the historical links between sex-economy of today and the psychoanalytic matrix from which it took its origin. The present chapter plays a singularly important role in the history of sex-economy. Before its publication as a chapter of the CHARAKTER-ANALYSE, it was published as an article in the Internat. Zeitschr. f. Psychoanalyse, vol. 18, 1932. It was a milestone in that it provided the clinical refutation of Freud's theory of the death instinct. For the first time in the history of sexual pathology, the following facts were demonstrated on the basis of clinical investigation:

a) The manifestations which were erroneously ascribed to a hypothetical death instinct were actually due to a specific form of orgasm anxiety;

b) masochism is no instinct or drive in the biological sense; it is a *secondary* drive in the sex-economic sense, that is, a result of the repression of natural sexual mechanisms;

c) there is no such thing as a biological striving for unpleasure, there is no death instinct.

In the succeeding years, parts of this clarification of the problem of masochism were taken over by many psychoanalysts, without mention of their source. But none of them even mentioned the *central* aspect of the problem, that is, the *specific* masochistic disturbance of the orgasm function which expresses itself in a *fear of dying* or *fear of bursting*. Thus, the solution of the problem of masochism remained the exclusive achievement of sex-economy.

The publication of this article in 1932 was accompanied by some rather dramatic events. Freud, as the Herausgeber of the Internat. Zeitschr. f. Psychoanalyse, wanted to have the article published only on the proviso that he would add a note in which he was going to declare that Wilhelm Reich had written this article against the death instinct theory "in the service" of the Communist party. Certain Berlin psychoanalysts who opposed this nonsense suggested another procedure: Reich's article was to be published together with a reply. This was done. This "reply" was written by Siegfried Bernfeld under the title, *Die kommunistische Diskussion um die Psychoanalyse und Reich's "Widerlegung der Todestriebhypothese,"* and appeared in the same number of the Zeitschrift. This article of some 30 pages did not deal with the problem of masochism at all, but with Wilhelm Reich's contributions to Marxist sociology. In other words, since Reich's clinical findings and formulations could not be refuted, an attempt was made to discredit his theory of masochism by the imputation of political, emotional

* Translated by the Editor.

motives. This attempt failed thoroughly. We leave it to the reader of the translation of this article to decide whether it is of a clinical or of a political and philosophical nature.

The fact must again be emphasized that the sex-economic clarification of the problem of masochism—which was identical with the clinical refutation of the death instinct theory—represented an enormous step forward in the understanding of the neuroses. For it showed that human suffering was not due to an unalterable "biological will to suffer," to a "death instinct," but to the disastrous effect of *social* conditions on the biopsychic apparatus. This entailed the necessity of criticizing the social conditions which created the neuroses—a necessity which the hypothesis of a biological will to suffer had circumvented.

The sex-economic solution of the problem of masochism also opened an avenue of approach into the biological basis of the neuroses. It was precisely the specific masochistic fear of "bursting" which opened the way to an understanding of the functioning of the vegetative life apparatus (*cf.* THE FUNCTION OF THE ORGASM, 1942, pp. 221-255).

The publication in translation of the present work at this time, then, is no less pertinent than it was at the time of its original publication 12 years ago. It shows the nature of certain kinds of so-called scientific criticism in that not a single one of the contentions that were used 12 years ago against Reich's theory of masochism could even be published today. That kind of argumentation never had a rational basis and belongs to a dead past.—T. P. W.

THE MASOCHISTIC CHARACTER

1. RÉSUMÉ OF CONCEPTS

Sexology before Freud held essentially the view that masochism represented a special instinct tendency to derive satisfaction from suffering physical or moral pain. Since these goals are unpleasurable, the central problem was how it is possible that unpleasure should be striven for or should even provide satisfaction. The use of a technical term was only an evasion; "algolagnia" means nothing but a circumlocution of the fact that an attempt is made to derive pleasure from being hurt or offended. Many writers came closer to the truth when they asserted that being beaten was not the immediate aim but only a link in the experience of pleasurable self-depreciation (Krafft-Ebing). Nevertheless, the fundamental formulation was the same: *What the normal person perceives as unpleasure, the masochist perceives as pleasure or, at any rate, as a source of pleasure.*

Psychoanalytic investigation of the latent content and the dynamics of masochism provided a wealth of new insights. Freud discovered that masochism and sadism do not form an absolute antithesis, that one never occurs without the other. Masochism and sadism can each turn into the other. There is a dialectic antithesis, determined by a change from activity to passivity while the ideational content remains the same.[1] Freud's theory of libidinal development distinguishes three main stages of infantile sexuality, oral, anal and genital. At first, sadism was ascribed to the anal phase. Later it was found that each of the stages of sexual development has a form of sadistic aggression corresponding to it. In following up this problem, I found each of the three forms of sadistic aggression to be a reaction to the frustration of the corresponding partial impulse. According to this concept, the sadism on each level of development results from a mixture of the destructive impulse against the frustrating person with the corresponding sexual demand[2], in the following way: Sucking, frustration → destructive tendency, biting: *oral sadism;* anal pleasure, frustration → wanting to squash, to step on, to beat: *anal sadism;* genital pleasure, frustration → wanting to pierce; *phallic sadism.* This concept was entirely in harmony with Freud's original formulation that the destructive tendency toward the outer world develops first (usually as a result of frustration) and later turns against the self when it, also, becomes inhibited by frustration and fear of punishment. Sadism, in turning toward the self, becomes masochism; the superego, the representation of the frustrating person, of the demands of society on the ego, becomes the punishing agency (conscience). The guilt feeling correspondings to the destructive impulse which comes into conflict with love.

Later, Freud gave up this concept of masochism as a secondary formation. He replaced it by the converse concept that sadism is masochism turned toward the outer world; he assumed the existence of a *primary biological* tendency to self-destruction, a primary or erogenous masochism. This concept later turned into that of the "death instinct," the antagonist of "eros." Primary masochism was thought of as an expression of a biological death instinct which was based on the processes of dissimilation in every cell of the organism.

The proponents of the theory of the death instinct again and again tried to substantiate their views by pointing to

[1] Freud, "Triebe und Triebschicksale." Ges. Schr., Bd. V, p. 433.

[2] Reich, W.: "Ueber die Quellen der neurotischen Angst." *Int. Zeitschr. f. Psa.* 11, 1926, 427.

physiological processes of dissimilation. None of these attempts was in any way convincing. A recent paper[3] deserves mention because it approaches the problem clinically and sets forth physiological arguments which at first glance seem convincing. Benedek bases her argument on the findings of Ehrenberg. This biologist found that even in the protozoon an antithetical process can be found. Certain processes in the protoplasm lead not only to the assimilation of the food, but also to a precipitation of previously dissolved substances. This first formation of a structure is irreversible; dissolved substances become solid. What assimilates is alive; what develops by way of assimilation, changes the cell, gives it a higher structure which, from a certain point on, i.e., when it gains preponderance, is no longer life, but death. That sounds logical particularly when we remember the hardening of the arteries with advancing age. But this very argument contradicts the assumption of a *tendency* to death, a death *instinct.* What has become solid and immobile hinders life and its cardinal function, the alternation of tension and relaxation, in the gratification of hunger as well as the sexual needs. This disturbance of the life process is exactly the opposite of what characterizes instinct. The rigidity renders the rhythm of tension and relaxation impossible again and again. If we wanted to see an instinct in these processes, we would have to change our concept of the instinct.

If, furthermore, anxiety is considered the expression of a "death instinct become free," it would have to be explained how "solid structures" can become free. Benedek says herself that the structure, that which has become solid, can be considered inimical to life only when it becomes predominant and hinders the life processes.

Furthermore, if the structure-forming processes are synonymous with the death instinct, if, as Benedek assumes, anxiety corresponds to the inner conception of this increasing solidification, i.e., death, then one would expect children and adolescents not to have any anxiety, while old people would have only anxiety. The exact opposite is the case: anxiety is most pronounced during the periods when sexuality is at its height (i.e., when it is inhibited during these periods). According to this concept, we would find fear of death in the sexually satisfied individual also, since he is subject to the same process of biological dissimilation as the sexually unsatisfied one.

Following up consistently Freud's theory of actual anxiety, I arrived at a modification of his original formula according to which anxiety developed by conversion of libido. I found that anxiety is a manifestation of the same excitation of the vaso-vegetative system which in the sensory system is experienced as sexual pleasure.[4]

Clinical experience shows anxiety to be nothing but the sensation of a constriction (*"angustiae"*), of a stasis; fears (the idea of dangers) become affective anxiety only in the presence of such a stasis. If it should be found later on that the social restriction of sexual gratification accelerates the structure-forming process, that is, dying, this finding would not prove that anxiety is the result of these processes; it would only show the life-inimical effect of sex-negating morality.

The change of the concept of masochism automatically involved a change of the etiological formula of the neurosis. Freud's original concept was that psychic development takes place in the conflict between instinct and outer world. Now the concept came to be that the psychic conflict was the result of a conflict between eros (sexuality, libido) and death instinct (in-

[3] Therese Benedek, "Todestrieb und Angst." *Int. Zeitschr. f. Psa.* 17, 1931.

[4] Reich: DIE FUNKTION DES ORGASMUS, 1927, p. 63 ff.

stinct to self-destruction, primary masochism).

The clinical starting point for this dubious hypothesis was the peculiar fact that certain patients seem to be unwilling to relinquish their suffering and keep seeking painful situations. This was in contradiction to the pleasure principle. There seemed to be a hidden inner intention to hold on to the suffering and to experience it again and again. The question was whether this "will to suffer" was a primary biological tendency or a secondary psychic formation. There seemed to be a need for punishment which satisfied the demands of an unconscious guilt feeling by the infliction of self-damage. After the publication of *Jenseits des Lustprinzips,* psycho-analytic writers, led by Alexander, Reik, Nunberg and others, without being aware of it, changed the formula of the neurotic conflict.[6] The original formulation was that the neurosis results from the conflict between instinct and outer world (libido—*fear* of punishment). Now they said the neurosis resulted from the conflict between instinct and need for punishment (libido—*wish* for punishment). The exact opposite. This concept was based on the new hypothesis of the antithesis between eros and death instinct, and made the significance of the frustrating and punishing outer world recede more and more into the background. The answer given to the question, Where does suffering come from? was now: "from the biological will to suffer, from the death instinct and the need for punishment." This made one conveniently forget the correct answer which was: from the outer world, from frustrating society. This formulation blocked the avenue of approach to sociology, an avenue which the original formulation of the psychic conflict had opened wide. The theory of the death instinct, of a biological will to self-destruction, leads to a cultural philosophy such as that expressed in Freud's UNBEHAGEN IN DER KULTUR; a philosophy which asserts that human suffering is inevitable because the self-destructive tendencies cannot be mastered. Conversely, the original formulation of the psychic conflict leads inevitably to a criticism of the social order.

Placing thus the source of suffering from the outer world, society, into the inner world, was in conflict with the basic original principle of analytic psychology, the *"pleasure-unpleasure-principle."* This is a basic law of the psychic apparatus, according to which man strives for pleasure and tries to escape unpleasure. This principle, according to the original psychoanalytic concepts, determined psychic development and psychic reactions. The *"reality principle"* was not an antithesis to the pleasure principle; it simply meant that reality imposes the necessity of postponing or relinquishing certain pleasures. These "two principles of psychic functioning," as Freud called them, could be valid only as long as the original formulation of masochism was valid, that is, as long as masochism was considered inhibited sadism turned against the self. This was an explanation of masochism within the framework of the pleasure principle, but it still left unanswered the question of how suffering can be a source of pleasure. This was in contradiction to the pleasure function. One could well understand how ungratified and inhibited pleasure could turn into unpleasure, but not the reverse, how unpleasure could turn into pleasure. Thus, the explanation that masochism

[5] The theory of the death instinct dominates psychoanalytic literature at present. Freud, in a talk years ago, called this theory a hypothesis which was outside of clinical experience. In *Jenseits des Lustprinzips* he wrote that "one has to be ready to leave a path one has followed for some time if it does not seem to lead to anything good." In spite of these admonitions, the hypothesis developed into a clinical "theory"; it was not only not given up, it led to no good. Many analysts even contend that they have directly observed the death instinct.

consisted in experiencing unpleasure pleasurably meant nothing.

Most psychoanalysts felt that the assumption of a "repetition compulsion" solved the problem of suffering satisfactorily. True, it fitted marvelously the theories of the death instinct and of the need for punishment, but it was a more than dubious assumption. First, it was at variance with the pleasure principle. Second, it introduced into the theory of the pleasure-unpleasure-principle, which was clinically well founded, an undoubtedly metaphysical element, a hypothesis which was not only unproven but incapable of proof, and which caused great damage to analytic theory. The assumption was that of a biological compulsion to repeat situations of unpleasure. The "principle of the repetition compulsion" meant nothing because it was only a term, while the formulation of the pleasure-unpleasure-principle was based on the physiological laws of tension and relaxation. As long as the repetition compulsion was interpreted as the law that every instinct strives for the re-establishment of a state of rest, and as the compulsion to experience once-had pleasure again, no objection could be made. In this form, the concept was a valuable amplification of our concept of the mechanism of tension and relaxation. But, interpreted thus, the repetition compulsion is entirely *within* the framework of the pleasure principle; more than that, the pleasure principle explains the compulsion to repeat the experience. In 1923, still awkwardly, I interpreted the instinct as the characteristic of pleasure to have to be repeated.[8] Thus, the repetition compulsion *within* the pleasure principle is an important theoretical concept.

However, it was just the principle of the repetition compulsion *beyond* the pleasure principle which became important in psychoanalytical theory; this concept was used in an attempt to explain phenomena which apparently could not be explained by the pleasure principle. But it was not possible to establish clinical proof of the repetition compulsion as a *primary* tendency. It was supposed to explain a great many things and yet could itself not be demonstrated or explained. It led many analysts to the assumption of a super-individual "ananke." This assumption was superfluous for an explanation of the striving for the re-establishment of a state of rest, for this striving is fully explained by the function of the libido to bring about a relaxation. This relaxation is nothing but the re-establishment of the original state of rest, and is implicit in the concept of the instinct. Incidentally, the assumption of a biological striving for death also becomes superfluous when one remembers that the physiological involution of the organism, its gradual dying, sets in as soon as the function of the sexual apparatus, the source of the libido, begins to decline. Dying, thus, is not necessarily anything but the cessation of the function of the vital apparatus.

It was the clinical problem of masochism which clamored for a solution and which led to the unfortunate assumption that a death instinct, a repetition compulsion and a need for punishment were the *basis* of the neurotic conflict. In a controversy with Alexander,[7] who based a whole theory of personality on these assumptions, I myself still adhered to the original theory of masochism as the last possible explanation. True, the question as to how unpleasure could be striven for, how it could turn into pleasure, was already in the air, but I had as yet nothing to say about it. The assumptions of Sadger, of an erogenous masochism, of a specific disposition of buttocks eroticism and skin eroticism to perceive unpleasure as pleas-

[6] Reich, W.: "Zur Trieb-Energetik." *Zeitschr. f. Sexualwissenschaft,* 1923.

[7] Reich, W.: "Strafbedürfnis und neurotischer Prozess. Kritische Bemerkungen zu neueren Auffassungen des Neurosenproblems." *Int. Zeitschr. f. Pta.* 13, 1927.

ure, was not satisfactory either. For why should buttocks eroticism plus pain be perceived as pleasure? And why did the masochist experience as pleasure what others, when beaten on the same erogenous zone, experienced as pain and unpleasure? Freud himself unravelled a part of the question when he discovered behind the phantasy, "A child is being beaten," the original pleasurable situation, "Not I, but my rival is being beaten." Nevertheless, the question why being beaten can be accompanied by pleasure remained. All masochists report that the phantasy or the act of being beaten is pleasurable, and that only with this phantasy can they have pleasure or sexual excitation.

Years of study of masochistic patients gave no clue. Only when I began to doubt the correctness and precision of the patients' statements did the light begin to dawn. It was astounding to see how little one had learned, in spite of decades of analytic work, to analyze the experience of pleasure itself. Exact analysis of the pleasure function revealed a fact which at first was completely confusing but which, nevertheless, suddenly explained the sexual economy and, with that, the specific basis, of masochism. What was surprising and confusing was that the formulation, "the masochist experiences unpleasure as pleasure," proved erroneous. It was shown that, rather, the *specific* pleasure mechanism of the masochist consists in the fact that while he strives for pleasure like any other person, a disturbing mechanism causes this striving to fail and causes him to experience as unpleasurable sensations which the normal person experiences as pleasure, when they exceed a certain intensity. The masochist, far from striving for unpleasure, suffers from a specific intolerance for psychic tensions and an overproduction of unpleasure far greater than in any other neurosis.

In discussing the problem of masochism I shall take as my point of departure not the masochistic perversion, as is usual, but its characterological reaction basis. I shall illustrate with the history of a patient who was treated for almost four years and which solved questions which a number of previously treated cases had not answered but which became clear in retrospect from the results of this case.

2. THE ARMORING OF THE MASOCHISTIC CHARACTER

Only the smallest minority of masochistic characters also develop a masochistic perversion. The sexual economy of the masochist can be understood only from an understanding of his character reactions. Therefore, in presenting this case, we follow the path which every psychoanalytic treatment has to follow if it is to do more than explain the case theoretically and is to establish genital primacy with orgastic potency.

Every character formation serves two functions. First, the armoring of the ego against the outer world and the inner instinctual demands; second, the economic function of absorbing the excess of sexual energy which results from sexual stasis, or in other words, of keeping this energy from manifesting itself as anxiety. While this is equally true of any character formation, the form in which these functions are fulfilled, are specific, that is, different for the various forms of neurosis. Every character type develops its own mechanisms. It is, of course, insufficient to know the basic functions of the character (defense and prevention of anxiety) in a patient; one has to find out quite early in which specific manner the character serves this function. Since the character absorbs the greater part of the libido (and anxiety); since, further, it is our task to liberate essential amounts of sexual energy from its chronic anchoring in the character and to make it available to the genital apparatus and to sublimation, the analysis

of the character leads us to the root of the pleasure function.

Let us summarize the main traits of the masochistic character. These traits are found, individually, in all neurotic characters. Together, they form the masochistic character only when they are all present, and when they determine the key to the personality and its typical reactions. Typical masochistic character traits are the following: subjectively, a chronic sensation of *suffering*, which appears objectively as a *tendency to complain;* chronic tendencies to *self-damage* and *self-depreciation* ("moral masochism") and a compulsion *to torture others* which makes the patient suffer no less than the object. All masochistic characters show a specifically *awkward, atactic behavior* in their manners and in their intercourse with others, often so marked as to give the impression of mental deficiency. There may be other traits, but these are the typical and specific ones.

It is important to remember that this character-neurotic syndrome may be obvious on the surface in some cases, while in many other cases it is covered up by a superficial mask.

Like any other character attitude, the masochistic attitude shows not only in interpersonal relationships, but also in the inner life of the person. Attitudes which originally were attached to objects are maintained toward the introjected objects, the superego. Frequently, this is of decisive importance. What was originally external and then became internalized, must again be externalized in the analytic transference: in the transference behavior that is repeated which was acquired in infancy in the relationship with the object.

The patient from whose case history excerpts are given here came to analysis with the following complaints: Since the age of 16, he had been completely incapable of working and had no social interests whatsoever. Sexually, there was a severe masochistic perversion. He never had had sexual intercourse, but masturbated every night for hours in a way which is typical of pregenital libidinal structures. He would roll around on his stomach with the phantasy that a man or a woman was beating him with a whip; during this he would squeeze his penis. That is, he did not masturbate like a genital character who will induce sexual excitation by more or less regular friction. Instead, he would knead the penis, squeeze it between his legs or roll it between the palms. *As soon as the ejaculation approached, he would hold back and wait until the excitation had subsided, whereupon he would start anew.* In this way he would masturbate for hours, every night, often also during the day, until he was completely exhausted and finally permitted an ejaculation. The ejaculation did not take place in rhythmical spurts; the semen would simply flow out. Afterwards he felt exhausted, leaden, incapable of doing anything, depressed, tortured, "masochistic." He found it almost impossible to get himself out of bed in the morning. In spite of the most severe guilt feelings, he could not stop this "lazing in bed." The whole thing he later called the "masochistic bog." The more he rebelled against it, the less was he able to work himself out of this "masochistic mood"; on the contrary, he got into it all the more deeply. At the time when he came for treatment, this kind of sexual life had already lasted several years. The effect on his whole being and his emotional life had been disastrous.

The first impression I gained of him was that of an individual barely able, with all his will power, to hold himself together. This was partly covered up by a very refined and poised behavior; he talked about his ambition of becoming a mathematician. In the analysis, this turned out to be a well-developed idea of grandeur. For years he had been wandering alone through the woods of Germany,

thinking out a mathematical system which would make it possible to calculate and change the whole world. This superficial compensation disintegrated very soon in the analysis when I made him understand its function. It served the function of counteracting the feeling of his absolute worthlessness which, in connection with his masturbation—which he experienced as "filth" and a "morass"—was constantly being reproduced. The "mathematician," the symbol of the pure scientist and asexual individual, was to cover up the "morass individual." The fact is not important here that the patient gave the definite impression of an incipient schizophrenia of the hebephrenic type. What is important here is only that the "pure" mathematics was a protection against the "filthy" feeling of himself which was due to his anal type of masturbation.

With the dissolution of his superficial mask the masochistic attitude made its full appearance. Every treatment hour began with a complaint. Soon there was frank masochistic provocation of an infantile sort. When I asked him to amplify or explain some statement, he would try to nullify my endeavors by such outcries as "I won't, I won't, I won't." In this connection we found that as a boy of 4 or 5 he had gone through a phase of the most severe spite with attacks of yelling and kicking. These occurred on the slightest provocation and made his parents desperate, helpless and furious. Occasionally, such attacks would last for days, until they ended in complete exhaustion. Later he found out by himself that this phase of spite had ushered in his masochism.

The first phantasies of being beaten appeared at the age of about 7. Not only did he fantasy that he was taken across somebody's knee and beaten; he often went to the bathroom, locked himself in and tried to whip himself. A scene from the third year of life, which did not appear until the second year of the analysis, was undoubtedly a traumatic scene. He had been playing in the garden and had soiled his pants. Since there were guests present, his psychopathic and sadistic father got furious, carried him inside and put him on a bed. The boy *immediately turned on his stomach and waited for the beating with great curiosity, mixed with anxiety*. The blows were heavy, but the boy had a feeling of relief; a typically masochistic experience which was his first.

Had the beating given him pleasure? Further analysis showed unequivocally that he had anticipated something far worse. He had so quickly turned on the stomach in order to protect his genitals from the father,[8] and *for this reason had experienced the blows on the buttocks as a great relief;* they were harmless compared to the anticipated injury to the genital and this relieved him of a good deal of anxiety.

In order to understand masochism as a whole, one must clearly comprehend this basic mechanism. With this, we are ahead of our story, for this did not become fully clear until after one and a half years' treatment. Until then, the time had been mostly taken up with the attempts, at first fruitless, to master the patient's masochistic spite reactions.

Later on, the patient described his masturbatory behavior like this: "As if I were turned with screws from my back to my stomach." At first I thought this was a beginning phallic sexuality, until I found that it was a defensive action. *The penis had to be protected; rather suffer blows on the buttocks than have the penis injured*. This basic mechanism also determined the role of the beating phantasy. *What later became a masochistic wish had originally been a fear of punishment.* The

[8] This mechanism was stressed by Freud in his article, *Das ökonomische Problem des Masochismus* (Ges. Schr., V, p. 378). Its clinical examination, however, does not lead to the hypothesis of a primary masochism, but, on the contrary, to its refutation.

masochistic beating phantasy thus anticipates in a milder form an expected heavy punishment. Alexander's formulation that by satisfying the need for punishment one purchases sexual pleasure has to be correspondingly interpreted. One does not punish oneself in order to placate or "bribe" one's superego, whereupon pleasure can be experienced without anxiety. Rather, the masochist approaches pleasurable activity like any other person, *but the fear of punishment interferes*. The masochistic self-punishment is *not* the execution of the dreaded punishment, but of a milder substitute punishment. It represents a specific mode of defense against punishment and anxiety. A part of this is the passive-feminine attitude toward the punishing person so frequently found in masochistic characters. Our patient once proffered his buttocks in order to be beaten, as he said. In reality, this wanting-to-be-beaten was an offering of himself as a woman (in the sense of Freud's interpretation of the passive beating phantasy as a substitute for a passive-feminine desire). The non-masochistic passive-feminine character fulfills this function of defense against the threat of castration by a purely anal attitude, without adding the beating phantasy to ward off anxiety.

This leads in a straight line to the question whether a striving for unpleasure is possible. We shall postpone the discussion of this question until the character-analysis of this patient has provided the necessary basis.

In the analysis, the infantile spiting phase of our patient was reactivated in a completely undisguised and uninhibited manner. The analysis of the crying spells lasted about six months, but it resulted in the complete elimination of this way of reacting. At first it was not easy to induce the patient to reactivate the spiteful actions of his childhood. His reaction was that a refined person, a mathematical genius, could not do such things. However, it was unavoidable. If this layer of the character was to be unmasked as a defense against anxiety and was to be eliminated, it had to be first reactivated to the full extent. When the patient started his "I won't," I first tried interpretation, but my endeavors were completely ignored. So I began to imitate the patient; when I gave an interpretation of his behavior, I immediately added the "I won't" myself. At one time he reacted suddenly with involuntary kicking. I seized the opportunity and asked him to let himself go completely. At first he could not understand how anybody could ask him to do a thing like that. But more and more he began to thrash around on the couch, which behavior turned into highly emotional spiteful yelling and inarticulate, animal-like sounds. A particularly violent attack of this kind occurred one day when I pointed out to him that his defense of his father was only a mask for his tremendous hatred of him. I did not hesitate to grant to him that this hatred had a good deal of rational justification. After this, his actions began to assume an almost frightening character. He yelled so that the people in the house began to get fearful. However, this was the only avenue of approach to his deep emotions; only in this way was he able to re-live his infantile neurosis fully and affectively, not just in the form of recollections. Again and again, it was possible to deepen his insight into his behavior. Its meaning was a grandiose *provocation of the adults,* and, in a transferred sense, of my person. But, the question was, *why did he provoke?*

Other masochistic patients try to provoke the analyst with the typical masochistic silence. Our patient did it with infantile spite reactions. It took a long time until I could make him understand that his provocation was an attempt to make me strict and to drive me furious. But this was only the superficial meaning of the behavior. If the deeper meaning is

so often overlooked it is because of the erroneous belief that the masochist seeks punishment in itself, for the gratification of a guilt feeling. In reality it is not a matter of punishment at all, but of *placing the analyst, or his prototype, the parent, in a bad light,* of provoking him into a behavior which would rationally justify the reproach, "You see how badly you treat me." This provocation of the analyst is, without exception, one of the first great difficulties in any masochistic character. Without uncovering this meaning, one will not get one step further.

What is the meaning of thus provoking the analyst, of placing him in a bad light? The meaning is: "You are bad, you don't love me. On the contrary, you are cruel to me, and I have a right to hate you." The justification of the hatred and the reduction of the guilt feeling through this mechanism are, however, only intermediate processes. True, if one assumes guilt feeling and need for punishment to be manifestations of a biological death instinct, one will be inclined to the belief that with the discovery of the rationalization of the hatred and the provocation of the object one has hit rock bottom. But the main problem of the masochistic character is not his guilt feeling, nor is it his need for punishment, no matter how important they seem to be. Why, then, does the masochist try to place his object in a bad light?

Behind the provocation there is a deep *disappointment in love.* The provocation is directed especially against those objects who caused a disappointment, that is, objects which were loved intensely and who either actually disappointed or who did not sufficiently gratify the child's love. The actual disappointments in the masochistic character are intensified by a particularly high need for love which makes a real gratification impossible and which has specific inner reasons which will be discussed later.

As time went on and the patient became convinced that he could not make me furious, the behavior persisted, but for a different reason. Now it gave him obvious pleasure to let himself go. His acting out became a hindrance; the hours were filled with infantile kicking and yelling. Now I could show him that his provocation originally had served a second purpose, namely to see how far he could go with his naughtiness before I would withdraw my love and proceed to punishment. He had convinced himself that he need not be afraid; he could be naughty without being punished. The continued naughty behavior, then, showed the fear of punishment to be unfounded and thus was a source of pleasure. It had nothing at all to do with any wish to be punished though I searched assiduously for it. At the same time there were continued complaints about his condition, about the morass he could not get out of and—implicitly—I did not help him to get out of. Masturbation continued in the same manner and put him daily in the "morass" mood to which he gave vent in complaints, that is, in masked reproaches. Under these circumstances the analysis made no progress. To prohibit the spite reactions was out of the question; it might have stopped everything. So I began to show him a reflection of himself. When I opened the door, he would stand there with a drawn face, in an attitude of utter dejection. I would imitate his attitude. I began to use his infantile language, I lay on the floor and kicked and yelled as he did. At first he was surprised, but one day he began to laugh, in an absolutely adult and unneurotic way; a breakthrough, although only temporary, had succeeded. I repeated these procedures until he himself began to analyze the situation.

What was the meaning of the provocation? It was his way of *demanding love,* as it is the way of all masochistic characters. He needed proofs of love which would reduce his anxiety and inner tension. The more his unfortunate masturbation increased his tension, the more he intensified his demand for love. The more he had the "morass feeling," the more intensive became his masochistic attitude, that is, his demand for love. But why was this demand made in this *indirect, disguised* manner? Why did he fight any interpretation of his affection? Why did his complaints continue?

His complaints had the following layers of meaning, corresponding to the genesis of his masochism. "Look how miserable I am; please love me"—"You don't love me enough, you treat me badly"—"You must love me. I shall force you to; or else I'm going to annoy you." The masochistic torturing, the masochistic complaint, provocation and suffering all explain themselves on the basis of the frustration, fantasied or actual, of a demand for love which is excessive and cannot be gratified. This mechanism is *specific* for the masochistic character and no other form of neurosis; if it occurs in other neuroses, one also finds the corresponding masochistic element in the character.

What is the meaning of the excessive demand for love? The answer is given by an analysis of the masochistic character's *disposition to anxiety.* The masochistic behavior and the demand for love always increase in proportion to the unpleasurable tension, the readiness to anxiety or the danger of loss of love. It is typical of the masochistic character to avoid anxiety by wanting to be loved. Just as the complaints are a disguised demand for love and the provocation an attempt to force love, so is the total masochistic character an *unsuccessful* attempt to liberate himself of anxiety and unpleasure. It is unsuccessful because, in spite of these attempts, he never gets rid of the inner tension which constantly threatens to turn into anxiety. *The feeling of suffering, then, corresponds to the actual facts of a continuous high inner tension and readiness to anxiety.* This becomes clearer if we compare the masochistic character with the compulsion-neurotic affect block. Here, the assimilation of anxiety has been successful. True, at the expense of psychic motility, but the inner tension is completely consumed by a well-functioning psychic apparatus, with the result that there is no restlessness. If the latter is present it means an insufficiency of the character armor.

The masochistic character attempts to allay the inner tension and the threatening anxiety by an inadequate method, that is, by *demands for love in the form of provocation and spite.* Of course, this has its special reasons, that is, this manner of voicing a demand for love is specifically masochistic. The essential element in the failure is, however, that the spite and the provocation are directed against the very person who is loved and from whom love is demanded. In this way, the fear of losing love is increased; similarly, the guilt feeling, instead of being decreased, increases, because it is the loved person who is being tortured. This explains the peculiar behavior of the masochist: the more he tries to get out of his situation of suffering, the more he gets entangled in it.

The attitudes thus far mentioned are found, individually, in other characters also. Only their combination is specific of the masochistic character. But what causes this combination?

We mentioned the *excessive* demand for love. We have to add that this is based on *fear of being left alone* which the masochist experienced intensely in very early childhood. The masochistic character can tolerate being left alone no more than the threat of losing a love relationship. The fact that masochistic characters so often get lonely is the secondary result of the attitude, "See, how miserable, alone, and deserted I am." Our patient, during a discussion of his relationship with his mother, said once in great excitation:

"To be left alone means death, means the end of my life." This content, in different words, I have heard very often from masochistic characters. The masochistic character cannot tolerate giving up an object (hence the masochistic sticking to a love object), any more than he can divest it of its protective role. He does not tolerate the loss of contact and tries to re-establish it in his inadequate way, that is, by showing himself miserable. Many of these characters develop the feeling of being alone in the universe.

A number of psychoanalytic authors (e.g., Sadger and Federn) have pointed out that skin eroticism plays a special role in masochism. They made the mistake, though, of considering skin eroticism the immediate basis of the masochistic perversion; analysis shows, however, that this is the case only under certain conditions and by way of a very complicated development. Only the fear of being left alone is based directly on the fear which may arise when the contact with the skin of the beloved person is lost. Let us summarize the symptoms which, in the erogenous masochist, refer to the skin. There is always some kind of wish for activity at the skin or at least phantasies of it: to be pinched, brushed, whipped, fettered, to make the skin bleed, etc. The buttocks play an important part here, but only indirectly, as a result of an anal fixation. All these wishes have in common that the patient wants to feel the *warmth of the skin*, not pain. If a patient wants to be whipped, it is not because he wants to feel pain; the pain is taken in the bargain because of the "burning." Many masochists fantasy directly that their skin is being burned. Cold, on the other hand, is abhorrent. This also explains the "lazing in bed" as a gratification of the need for skin warmth.

This is easily understood from the physiology of anxiety and pleasure. Contraction of the peripheral vessels increases anxiety (pallor of fright, feeling cold when scared); the sensation of skin warmth which is based on dilatation of the peripheral vessels and a greater blood flow, is a specific part of the pleasure syndrome.

It is not easy to understand why bodily contact with a beloved person relieves anxiety. Probably both the direct body heat as well as the innervation of the peripheral vessels in the expectation of maternal protection alleviate the central tension.[9] In this context it is sufficient to point out that the peripheral vasodilatation, which relieves the inner tension and anxiety, is the erogenous basis of the masochistic character. His later striving to avoid the loss of contact is only the psychic reflection of an actual physiological process. To be left alone in the world means being cold and unprotected, and an intolerable condition of tension.

Oral fixation does not seem to have a specific significance in masochism, though it is always present to a marked degree, as in all pregenital characters. There is no doubt that the oral demands contribute to the insatiable character of the masochistic love demands. But the oral demands in masochism seem to be more the result of a regression to an early disappointment in the love object and consecutive fear of being deserted, than a primary cause of the masochistic need for love.

Several cases disclosed another source of their excessive need for love: the fear of being left alone set in at a time when violent aggression and infantile sex curiosity —unlike the previous oral and anal impulses—met with serious rebuff from the beloved parents. The enormous fear of punishment which prevents the progress to genitality is a result of this contradiction

[9] *Footnote, 1944:* The orgone energy which was discovered in 1939 provides the explanation for this phenomenon: The alleviation of the child's anxiety by bodily contact with the mother is explained, orgone-biophysically, by the orgonotic expansion of the child's biosystem which reaches out for the mother. There is a contact between the orgone fields of the two organisms.

between sexual impulses which are permitted, even encouraged, on the one hand, and impulses which are threatened with severe punishment on the other hand. Our patient was allowed to eat as much as he pleased, in fact, he was encouraged to eat much; he was allowed to lie in bed with his mother, to embrace and stroke her; there was much interest in his excretory functions. But when he proceeded to new possibilities of sexual gratification, when he began to show interest in his mother's genital and wanted to touch her, he met the full severity of parental authority.

To the extent to which oral demands play a role in masochism, they determine, as in other forms of neurosis, the depressive tendencies. What is specific for masochism is the combination of skin eroticism, anality and the fear of being left alone which the masochist tries to master by bodily contact. This erogenous disposition is one of the chief causes of the excessive demand for love which has the specific nuance of "warm me" (= "protect me"). The "beat me" is already a disguised expression of this demand. It looks as if the masochist had received too little love and for this reason had developed such a strong demand for love. This is correct only insofar as he has always suffered severe frustrations of love; but very often the excessive demand is also a result of over-coddling. This excessive character of the love demand is in turn the result of certain harmful educational influences which are characteristic of the patriarchal system.

The question here is what determines the erogenous disposition of the masochistic character. It is not simply an anal or skin-erotic disposition, but the result of a specific combination of external influences upon the erogeneity of the skin as well as upon the total sexual apparatus which create the basis of the masochistic character. Only when we know these influences can we understand the other character traits of the masochist.

3. INHIBITED EXHIBITIONISM AND TENDENCY TO SELF-DEPRECIATION

We shall now turn to the discussion of a few other masochistic character traits, this time in connection with the sexual structure of the masochist. I shall report only those analytic findings which, taken together, are specific for masochism, as well as those which are at the basis of the masochistic disturbance of the pleasure mechanism.

It had taken about a year to break through the character armor of spite, provocation and complaining sufficiently to break through into early childhood and, more importantly, to the point where the patient actively participated in the analytic work. After this, particularly after the repression of his hatred for his father and his fear of him had been dissolved, there was a powerful breakthrough of his genitality. He had erections, his masturbation was no longer masochistic, and he had genital desires for a woman. An initial failure of his genital attempts led to the analysis of his deep, specifically anal love for his mother. While he made rapid progress, the following was striking:

His approach to women was very vigorous, but at the same time he could not get rid of a feeling of an ***inner struggle*** and ***artificiality***. This again and again gave rise to masochistic complaints that, in spite of external improvement, he did not feel well: "Nothing has changed about the masochistic morass."

The slightest incident was enough to cause an immediate disappointment; the least difficulty made him retreat from reality into his masochistic phantasies. This oscillation between attempts to establish genital reality and rapid retreats into masochism lasted for many months. I knew that his castration anxiety had not been worked out and that this was the

reason. The concentration of the work on this aspect brought a wealth of interesting results. To begin with, the patient, who previously had shown no trace of genital interest, proved full of genital anxieties. Only a few examples: the vagina is a "morass," full of snakes and worms; the tip of his penis is snipped off; one sinks into an abyss and does not find one's way out. The discussion of all these anxieties, however, did not change his labile condition in the least; for months, every hour began with his masochistically voiced complaint that he was "inwardly broken." An analysis of the transference situation showed again and again his passive-anal tendencies, specifically, the fact that he retreated from the woman as soon as a rival appeared. The idea of having a small penis seemed for some time incapable of correction. His attitude toward a rival was one of envy. This was, however, immediately covered up by a passive-feminine attitude; this is a well-known mechanism of warding off the fear of the father. However, even deep-reaching analysis of these attitudes did not change his feeling that, in spite of external successes, he remained a masochist.

After the first attempts at coitus in which he had been erectively potent, though unsatisfied, he developed a syphilophobia. One day he showed me his penis, asking me whether a small erosion was the sign of syphilitic infection. It was immediately clear that he wanted to exhibit himself. Now, the analysis immediately clarified an important point in his genital development. It turned out that as a child he had reached the genital phase only in the form of exhibiting his penis and that *his mother had rebuffed him severely*. This genital disappointment was all the more severe in that his mother had not only not prohibited his anal exhibition, but encouraged it by the intense interest which she had shown in his excretory functions. In fact, she used to go to the bathroom with him when he was as much as ten years old. The pleasure which he had derived from anal exhibition was the reason for his initiating the genital phase with exhibition of the penis. The analysis showed that his first attempts at a genital approach to his mother had been exhibitionistic. This impulse had soon been repressed and this repression resulted later in a severe inhibition in his general behavior. In his attempts at coitus, he never dared to show himself naked to the woman or to let her touch his penis. After the analysis of this element he seriously began to look for a profession, and decided to become a photographer. He started out by buying a camera and by snapping everything that he came across. This showed again how important the elimination of genital repression is for sublimation. Today he is very good in his profession. But for a long time he still lacked the inner satisfaction in his work: "I don't feel myself, but when I do, masochistically miserable."

Exhibitionistic onset of the genital phase with immediate strict prohibition and repression of exhibitionistic impulses and complete inhibition of further genital development is specific of the masochistic character. It is just as typical and specific as early phallic sadism and its inhibition and anal-sadistic fixation are for compulsion neurosis. This is at the basis of some character traits which determine the awkward, atactic manner of the masochist. Our patient described this inner situation as follows: "I feel like an officer who, sword drawn, runs far ahead of his troops, suddenly turns around and finds that nobody has followed him."

This feeling is connected with another character trait: Masochistic characters *cannot stand praise* and have a strong tendency to *self-depreciation*. In spite of a great ambition, our patient could not stand being near the top in his class. "If I remained a good student I would feel as

if I were standing in front of a crowd, showing my erect penis." This was by no means an incidental remark such as are made so often during an analysis; it went to the core of the matter. The inhibition and repression of genital exhibition leads to a severe impairment of sublimation, activity and self-confidence in later life. In the masochist, this inhibition goes as far as the development of contrary traits. The narcissistic character exhibits in a disguised form; the masochistic character uses a reaction formation, the exact opposite of exhibition: *self-depreciation, in order not to stand out*. He lacks the self-confidence of the genital character.

For these reasons, the masochistic character cannot be a leader, although he usually develops grandiose phantasies of heroism. His anal fixation makes him passive, and in addition, the inhibition of exhibitionism leads to self-depreciation. This structure of the ego is in conflict with an active, phallic ego-ideal which cannot make itself felt. This conflict creates another tension and another source of suffering which reinforces the masochistic process. The picture of the officer illustrates this ego-ideal which the masochist must hide, must be ashamed of, because the ego (the troops) do not—and cannot —follow.

In this connection a character trait needs to be mentioned which is common in masochists and children with masochistic tendencies: *to feel stupid or to make oneself appear stupid*. To exploit every inhibition for the purpose of self-depreciation is in full harmony with the masochistic character. One patient said one day he could not stand praise because it made him feel as if he were standing there with his pants down. One should not underestimate the significance of the anal fixation, of the exhibition of the buttocks, for the genital development of the child. The feeling of shame acquired in connection with anal activities is later transferred to the genital. Since any praise represents a provocation of exhibitionistic tendencies, since, further, to show oneself is connected with severe anxiety, the masochist must make himself small in order to avoid this anxiety. Having done so, he has an additional reason to feel neglected, which in turn provokes the whole need for love.

"Stupidity" or pretending stupidity also belongs here. Our patient once described an infantile scene in which he pretended stupidity, as follows: "I want something I don't get, then I get annoyed and stupid. But how much do they love me, even though I make myself stupid? When I'm not loved, I'm not worth loving and must make myself all the more ugly and stupid."

Now we can answer the question why the masochistic character expresses his demand for love in such a disguised form, why he is completely incapable of showing or demanding love directly. Another patient would always, when he wanted to win a woman, show himself miserable. He had a panicky fear of showing his love directly because the woman might get angry and might punish or shame him. He had the same inhibited exhibitionism as our patient.

All this taken together causes a feeling of inner ataxy, often a painful embarrassment about appearance. The inhibition of the ability to show and demand love openly brings about all kinds of distorted expressions and makes a person, as our patient put it, "bureaucratic," that is, unnatural and stiff. Behind this there is always a fear of disappointment or rebuff. Our patient once said: "I am confronted with the task of inserting a penis which is not erect into a vagina which is not offered to me."

In the place of frank manifestation of love, the hysterical character develops anxiety; the compulsive character, hatred and guilt feeling; and the masochistic character shows and demands love under the

disguise of complaining, provoking and showing himself miserable. These differences correspond fully to the specific genesis: the hysterical character has developed his genitality fully, but it is anxiety-laden; the compulsive character has replaced his genitality by phallic sadism; the masochistic character has reached genitality on the exhibitionistic level, then repressed it and now expresses his love in a specifically distorted form.

4. UNPLEASURABLE PERCEPTION OF INCREASE IN SEXUAL EXCITATION: THE SPECIFIC BASIS OF THE MASOCHISTIC CHARACTER

There is no neurotic structure without some form of genital disturbance. In the masochistic character the disturbances of the orgasm are of a specific form. Often they do not become obvious until the impotence or anesthesia have been more or less eliminated; this explains the fact that hitherto they were completely overlooked. We have already seen that the masochistic character has an increased production of unpleasure which gives his feeling of suffering a real basis. We have further seen that the masochist constantly tries to master his tension and disposition to anxiety by inadequate mechanisms; more than that, it is typical of the masochistic character that his attempts to avoid anxiety only cause more tension and unpleasure, which, in a vicious circle, again increases the disposition to anxiety. We have also found that the masochistic punishment, or the phantasy of it, represents a substitute for another punishment which is expected.

Can the experience of an anxiety, such as our patient had at the age of three, produce the masochistic fixation of the phantasy of being beaten? No, for the patient could, as others do, completely relinquish the sexual impulse which provokes the dreaded punishment; in doing so, he could save himself the masochistic solution of the punishment situation which only brings suffering. Thus, there must be something additional at the basis of the specific masochistic mechanism.

This mechanism cannot be detected until the patient has progressed to the genital level, that is, until he develops genital impulses. Then one encounters a new difficulty. The patient develops a strong genital desire which at first eliminates much of his masochistic attitude, but on the occasion of his first actual genital experience he feels unpleasure instead of pleasure; as a result of this, he is thrown back into the masochistic "morass" of his anal and sadomasochistic pregenitality. It was years before it became clear that the "incurability of the masochist, who *wants to* hold on to his suffering" was due only to our defective knowledge of his sexual functioning. The solution could not have been found if I had adhered to the concept that the masochist wants to suffer because of an unconscious guilt feeling or need for punishment due to a death instinct.

This does not mean a denial of the fact that self-punishment can ease the conscience. But this fact must be properly evaluated. The relief of guilt feelings through punishment is a superficial process which does not touch the core of the personality; it is relatively rare, and, in addition, is a symptom and not the cause of a neurosis. On the other hand, the conflict between sexual desire and fear of punishment is a central fact in every neurosis; without this conflict there is no neurotic process; it is itself not a symptom, but the cause of the neurosis. The recent psychoanalytic evaluation of the need for punishment has resulted in a misleading modification of the psychoanalytic theory of the neuroses and the theory of therapy; it blocked the way to a prevention of the neuroses and obscured the sexual and social origin of the neuroses.

The masochistic character is based on a very peculiar *spastic attitude* not only in his psychic but also in his genital apparatus which *immediately inhibits any strong pleasure sensation and thus changes it into unpleasure*. This constantly nourishes the suffering which is at the basis of the masochistic character reactions. It goes without saying that—no matter how thoroughly we analyze the meaning and genesis of the masochistic character—we will not achieve any therapeutic result unless we penetrate to the genesis of this spastic attitude. Otherwise we cannot establish orgastic potency which alone is capable of eliminating the inner source of unpleasure and anxiety. Let us return to our patient.

On the occasion of his first coitus, he had an erection, but he did not dare move his penis in the vagina. At first we thought this was due to bashfulness or ignorance; it took some time to find the real reason. *He was afraid of an increase in pleasurable excitation*. This is certainly, at first glance, a peculiar behavior. We always see it during the cure of orgastic impotence, especially in previously frigid women. In the masochist, however, it has a specific character. This will become clear from the material.

After the patient had had intercourse a few times it became clear that it provided far less pleasure than his masochistic masturbation. Nevertheless, he was able to imagine genital pleasure vividly, which became a powerful incentive in the treatment. The relative absence of genital pleasure was serious. For there is no other way of putting pregenital pleasure out of function than the establishment of the more intense genital pleasure. The absence of pleasure in the act certainly was no incentive to the development of his genitality.

In the course of further attempts, a new disturbance made its appearance: the erection disappeared during the act. Was this due only to castration anxiety, or was there something more? Further analysis of his castration fears failed to change the condition. Finally it turned out that the cramping of the musculature of the pelvic floor before ejaculation took place in masturbation was of greater significance than it had appeared at first. I am going to summarize the infantile material which shows that the masochist—in spite of his seemingly free and excessive anal and urethral gratification—has an *anal and urethral inhibition and anxiety* which goes back to early infancy. This inhibition is later transferred to the genital function and provides the immediate basis for his excessive production of unpleasure.

Between the ages of 3 and 6, our patient developed a fear of the toilet. He had the idea that an animal might crawl into his behind. With this, he began to hold back his stools which in turn created the fear of soiling his pants. If one soils one's pants, one gets a beating from father. This he had learned from that impressive scene which occurred when he was about three. If father beats one, there is also a danger of castration; in order to avoid injury to the genital, one must divert the blows to the buttocks. Nevertheless, he developed the fear that on these occasions, when he was lying on his stomach, he might get a splinter into his penis. All this together created a spastic condition of the musculature of the pelvic floor, of the genitals and the rectum. The resulting constipation intensified his mother's concern about his bowel movements, which created another conflict: while the mother showed intense interest in his bowel movements, the father beat him for it. This resulted in the predominantly anal foundation of his Oedipus complex. The patient soon developed the further fear that the bladder or the rectum might burst, that, in other words, the holding back was to no avail and he would again fall victim to his father's beatings. A hopeless situation which certainly was not of biological but of purely social origin. It should be men-

tioned that the father loved to pinch the buttocks of his children and that he used to threaten that he would "take their skins off" if they did not behave.

The boy had an anal fear of his father, together with an anal fixation to his mother, and a tendency to beat himself. Because of the relaxation and gratification connected with it, he felt his evacuation to be punishable; out of fear of his father's punishment, he began to beat himself. Plainly, this simple process is far more important for the pathology of this case than the identification with the punishing father and the masochistic attitude toward a developing anal superego. We have to keep in mind that such pathological identifications are in themselves neurotic formations; they are a result and not a cause of the neurosis.[10] True, we found all the complicated relations between ego and superego, but we did not stop there; the more important task was that of strictly differentiating those masochistic findings which corresponded to the actual behavior of the father from those which corresponded to inner erogenous impulses. This case, like many others, showed plainly that our educational methods deserve much more attention; that we distribute our attention very poorly if we turn 98% of it to analytic detail work and only 2% to the gross damages which are inflicted on the children *by the parents*. It is in this way that psychoanalytic findings fail to lead to the necessary criticism of patriarchal family upbringing.

In our patient, the infantile conflict situation was mainly due to the conflicting behavior of mother and father, respectively, with regard to anality. This conflict determined not only his feminine attitude toward the man (father) but also his feeling of emptiness and impotence. Later, the patient would feel himself impotent as soon as he got near an adult man; becoming afraid, he would withdraw his interest from the genital and would become anal, passive; this expressed itself in his admiration for these men.

All this allows the following conclusions: The customary training to excremental cleanliness (too early and too strict) leads to the fixation of anal pleasure; the associated idea of being beaten is definitely unpleasurable and at first anxiety-laden. It would be erroneous to say that the unpleasure of being beaten turns into pleasure. Rather, the *fear of being beaten prevents the development of pleasure*. This mechanism, acquired on an anal level, later is transferred to the genital.

As late as puberty, the patient still often slept with his mother in the same bed. At the age of 17, he developed a phobia about his mother becoming pregnant by him. The closeness to his mother and her body warmth stimulated his masturbation. The ejaculation had the meaning of urinating at his mother, as was to be expected in view of his specific development. If the mother should become pregnant, this would be proof of his urethral incest and severe punishment would threaten. At this point he began to hold back the semen and to masturbate with vivid masochistic phantasies. This was the actual onset of his disease. He became incapable of work at school. After an attempt at "self-analysis" which failed, there was a progressive psychic emptiness, together with nightly masturbation of the protracted, anal-masochistic kind.

The final breakdown was ushered in by a severe stasis neurosis with irritability, insomnia and migraine-like headaches. At that time he experienced a strong increase of his genital urge. He was in love with a girl, but did not dare approach her; he

[10] The neurosis is caused by the conflict between pleasure (ego) and punishing outer world, and is maintained by the conflict between ego and superego. The superego continues to function on the basis of the ever-repeated experience that sexual pleasure is punishable. The effect of the childhood inhibition is decisively supported by social actuality.

was afraid that he would "gas" her, and felt he was dying of shame at the very thought of it. He would follow girls at some distance, having vivid phantasies that they were "pressing their bellies against each other" and that that would result in a pregnancy which would give them away. In this behavior, his fear of being rebuffed because of his anal tendencies, played an important role. We see here a typical puberty situation: inhibition of genitality partly by the social barriers, partly by neurotic fixations resulting from earlier damage to the sexual structure by education.

At first there was, in addition to the genital tension, also an anal tension in the form of an urge to defecate or pass wind which had to be constantly controlled. The patient did not allow genital relaxation to take place. Not until the age of 17 did he succeed in having his first seminal emission; this with the aid of many hours of passive beating phantasies. After this, the stasis neurosis improved. But the first emission itself was experienced traumatically by the patient. He was so afraid of soiling his bed that during the emission he jumped up and grabbed the chamber pot; he was highly distressed because some semen had gotten in the bed.

When, during treatment, his genitality began to develop, the erection would disappear during the act. In this genital phase, masturbation began with normal masculine phantasies; but when the pleasure increased, the masochistic phantasy returned. The analysis of this shift from genitality to masochism *during* the sexual act revealed the following. As long as the pleasure sensations were mild, the genital phantasy persisted. But as soon as the pleasure increased and—as he put it—the "melting sensation" began to appear, he became afraid. Instead of letting himself go, he produced a spasm in the pelvic floor and thus changed the pleasure into unpleasure. He described very clearly how he perceived the "melting sensation"—normally a pleasurable orgastic sensation—as unpleasure and with anxiety. He was afraid that the penis would "melt away." The skin of the penis might dissolve as a result of that sensation, he said: the penis might burst if it went on getting increasingly taut (as it normally does just before the acme). He felt as if the penis were a sac filled with fluid to the bursting point.

Here we had the incontrovertible proof that what characterizes masochism is *not* that unpleasure becomes pleasure. On the contrary. A mechanism which is specific for masochism causes every pleasure sensation, as soon as it exceeds a certain degree of intensity, to be inhibited and thus turned into unpleasure. It is worth mentioning that the patient's castration fear referred to the *skin* of the penis: "I get as hot as a boiled chicken, when you can pull off the skin."

As a result of the fear of punishment, the "melting" sensation of warmth which occurs with the increase of excitation before the acme is experienced as the advent of the anticipated penis catastrophe; thus it inhibits the normal course of the sexual excitation and produces, on purely physiological grounds, unpleasure which may increase to pain. This process takes place in three phases: 1. "I strive for pleasure"; 2. "I begin to 'melt'—this is the punishment I feared"; 3. "I must kill the sensation if I want to save my penis."

At this point, an objection may be raised. It may be pointed out that the inhibition of sexual pleasure by infantile anxiety is found in *every* neurosis, that this cannot be the specific factor in masochism. The question may be raised, Why does not every inhibition of the involuntary increase in pleasure sensations lead to masochism? To this, the following is to be said:

Such an inhibition of the perception of pleasure can come about in two ways. The "melting" pleasure sensation was once experienced without anxiety; later, anxiety

inhibited the course of the sexual excitation, but pleasure continued, nevertheless, to be perceived as pleasure. Pleasure and unpleasure are two distinct processes. This mechanism operates in every *non*-masochistic inhibition of the orgasm.

In masochism, on the other hand, the melting sensation of pre-orgastic pleasure is *itself* perceived as the anticipated threat. The anxiety which was acquired in connection with anal pleasure creates a psychic attitude which makes genital pleasure—which is much more intensive—appear as injury and punishment.

Thus the masochistic character keeps advancing toward the expected pleasure and finds himself meeting unpleasure. It actually looks as if he were striving for unpleasure. What has really happened is that anxiety always comes between, and thus the desired pleasure comes to be perceived as the anticipated danger. End-pleasure is replaced by *end-unpleasure*.

This solves the problem of a repetition compulsion *beyond* the pleasure principle. The masochist gives the impression of wanting to repeat an unpleasurable experience. In reality, *he strives for a pleasure situation, but frustration, anxiety and fear of punishment interfere and cause the original goal to be obliterated or made unpleasurable*. In other words, a repetition compulsion beyond the pleasure principle does not exist; the corresponding phenomena can be explained within the framework of the pleasure principle and the fear of punishment.

To go back to our case, this disturbance of the pleasure mechanism definitely explained the flattening and protraction of his masturbation. *He avoided any increase in pleasure perception*. At the time this became clear, he once said, "It is impossible to let these sensations take their course, it is absolutely intolerable." We understand now why he masturbated for hours on end: he never reached satisfaction because he did not allow any involuntary increase in excitation to take place.

This inhibition has, in addition to fear of the increase, another reason. The masochistic character is used to the anal kind of pleasure which has a flat curve of excitation and has no acme; one might say it is a "lukewarm" kind of pleasure. The masochistic character transfers anal practice and the anal kind of pleasure experience to the genital apparatus which functions entirely differently. The intensive, sudden and steep increase of genital pleasure is not only unaccustomed but for one used only to the mild anal pleasure it is apt to be terrifying. If to this is added an anticipation of punishment, all conditions are given for an immediate conversion of pleasure into unpleasure.

In retrospect, this explained many earlier cases; particularly those who showed a suffering, masochistic mood after unsatisfactory (we would add now, after *specifically* disturbed) sexual activity. It explained, from the point of view of libido economy, the strong masochistic tendencies in the cases of orgastic disturbance described in my books, DER TRIEBHAFTE CHARAKTER and DIE FUNKTION DES ORGASMUS. Concerning a female patient with a masochistic perversion it is stated in the latter: "She masturbated . . . with the masochistic phantasy that she was shackled and completely undressed and put into a cage to starve. At this point the orgasm became inhibited because she suddenly had to think about a piece of apparatus which would automatically remove the feces and urine of the girl who was shackled and not allowed to move. . . . In the analysis, when the transference would take on the form of sexual excitation, she would develop an intense urge to urinate and defecate." If she masturbated with coitus phantasies "masochistic phantasies appeared shortly before orgasm was about to occur."

The masochistic attitude and phantasy, then, stems from the unpleasurable perception of the pleasure sensation; it is an attempt to master the unpleasure through an attitude which is psychically formulated as, "I'm so miserable—love me!" The beating phantasy must come in because the demand for love also contains genital demands which force the patient to divert the punishment from the front to the rear: "Beat me—but don't castrate me!" In other words, the masochistic reaction has a specific stasis-neurotic foundation.

The center of the problems of masochism, then, lies in the specific disturbances of the pleasure function. It became clear that it is the fear of the "melting" pre-orgastic pleasure sensation which makes the patient adhere to a pleasure of the anal kind. Is this the result of anal fixation or of genital inhibition? It would seem that both factors are equally involved, just as both factors cause the chronic neurasthenic condition. Anality mobilizes the whole libidinous apparatus, without, however, being capable of bringing about a relaxation of the tension. The inhibition of genitality is not only a result of anxiety, but produces anxiety in turn; this increases the discrepancy between tension and discharge. There remains the question why the beating phantasy typically sets in, or becomes intensified, just previous to the acme.

It is interesting to see how the psychic apparatus tries to diminish the discrepancy between tension and discharge, how the urge for relaxation breaks through, after all, in the beating phantasy. Our patient kept maintaining that "being beaten by the woman is exactly the same as secretly masturbating in her (= the mother's) presence." This, indeed, corresponded exactly to his actual experience: as a child and adolescent he did use to lie in bed with his mother while he masturbated in a masochistic fashion. That is, he would squeeze his penis, prevent ejaculation (because of his pregnancy phobia) and would fantasy that his mother was beating him; only then would ejaculation occur. This had the following meaning which the patient remembered consciously: "My penis seems all boiled to me. With the fifth or sixth blow it is bound to burst, as will my bladder." In other words, *the beatings were to bring about the relaxation which he was prohibited from bringing about in any other way*. If his bladder and his penis burst as a result of the beatings by his mother and an ejaculation took place, it was not his fault, for his tormentor had brought it to pass. The wish for punishment, then, has the following meaning: to bring about the relaxation after all, by way of a detour, and to shift the responsibility to the punishing person. We see the same mechanism in this basic process as in the characterological superstructure. In the latter it is: "Love me, so I won't be afraid"; the complaining means: "*You* are to blame, not I." The beating phantasy means: "Beat me, so I can get relaxation without being responsible for it." This seems to be the deepest meaning of the passive beating phantasy.

Since the time when I first recognized this deepest function of the passive beating phantasy, I have found this mechanism in other patients who had not developed a manifest perversion but who had kept their masochistic tendency latent by way of character changes. To mention only a few examples: A compulsive character developed a masturbation phantasy that he was among primitives who forced him to have coitus and to behave without any inhibitions. A passive feminine character without a manifest perversion had the phantasy that he was made to have an ejaculation by blows on his penis; the condition was that he was shackled in order to be able to stand the blows and be unable to run away. Here we have to mention also the common masochistic sex attitude of neurotic women, an attitude which by many analysts is considered the normal

feminine attitude. This passive rape phantasy in the woman, however, serves no other purpose than that of alleviating her guilt feelings. These neurotic women can engage in intercourse without guilt feeling only if—actually or in phantasy—they are raped, thus shifting the responsibility to the man. The formal resistance of many women in the act has the same meaning.

This takes us to the problem of so-called *"Angstlust"* (pleasure in anxiety) which plays such a big role in masochism. Following is a relevant example from another analysis:

A patient remembered that at the age of about four he consciously used to produce night terrors. He would crawl under the covers, masturbate, develop anxiety and then rid himself of it by suddenly throwing the covers off. How tempting in this case is the assumption of a repetition compulsion: he had had a night terror and now wanted again and again to re-experience the anxiety. There are two things which contradict such an assumption. First, he did not want to re-experience the anxiety, but the pleasure, notwithstanding the fact that the experience of the pleasure always led to anxiety. Second, the liberation from the anxiety was a source of pleasure. The essential point in the process, however, was that the anxiety resulted in anal and urethral sensations for the sake of which he was willing to suffer the anxiety. Anxiety as such is not pleasurable; it only gives rise to a certain kind of pleasure. Very often, children experience sensations of relaxation only in anxiety, sensations which they otherwise suppress for fear of punishment. The relaxation connected with the sudden loss of feces or urine in a situation of anxiety is often the reason for wanting to re-experience anxiety. But to explain these facts on an assumption *beyond* the pleasure principle would be a complete misinterpretation. Anxiety or pain, under certain conditions, becomes the only possibility of experiencing relaxation which otherwise is feared. The expressions of *"Schmerzlust"* or *"Angstlust"* thus can correctly mean only that pain or anxiety can become the occasion of sexual excitation.

The fact that in our patient the "bursting of the penis" seems to be the instinctual goal does in no way contradict our concept of masochism. This idea is on the one hand an idea representing anxiety or punishment; but on the other hand it also represents the desire of end-pleasure, of relaxation. It is due to this double meaning of the idea of bursting that end-pleasure itself comes to be perceived as the execution of dreaded punishment.

5. ON THE THERAPY OF MASOCHISM

The establishment of a healthy sex life, of a sound sex-economy, requires two therapeutic processes: the liberation of the libido from its pregenital fixations, and the elimination of genital anxiety. That this takes place by an analysis of the pregenital and genital Oedipus complex is a matter of course. One technical point, however, needs special emphasis: the danger of dissolving the pregenital fixations without, *at the same time,* eliminating the genital anxiety. Since in this case the orgastic discharge of energy remains inhibited, the danger is that of an increase in sexual stasis. This danger may be increased to the point of suicide, just at a time when the analysis of pregenitality has been successful. If, conversely, one eliminates the genital anxiety without eliminating the pregenital fixations, the genital energies remain weak, and the genital function cannot release the total amount of anxiety.

The main problem in the therapy of masochism is that of overcoming the patient's tendency to put the analyst in a bad light. The most important measure is to show the sadistic nature of this masochistic behavior. This reverses the original process of sadism being turned inward, toward the self; passive-masochistic-anal phantasies turn into active-sadistic-phallic phantasies. When in this way infantile genitality is reactivated, it becomes possible to uncover the castration anxiety which previously was covered up by the masochistic reaction.

It goes without saying that these measures do as yet not influence the masochistic character of the patient in the least. His complaining, spiting, self-damaging tendencies and his awkwardness—which presents a rational reason for withdrawing from the world—usually persist until it has become possible to eliminate the above-described disturbance of the pleasure mechanism in masturbation. Once genital orgasm has been achieved the patient usually undergoes a rapid change. Nevertheless, there remains for some time the tendency to take flight back into masochism at the slightest disappointment, frustration or dissatisfaction. Even consistent and thorough work on both the genital anxiety and the pregenital fixation can guarantee success only if the damage to the genital apparatus is not too severe and if, in addition, the patient's environment is not such as to throw him back again and again into his old masochistic groove. Thus, the analysis of a young unmarried man will be much easier than that of a masochistic woman who is at the menopause or economically tied to an unfortunate family situation.

The thorough work on the masochistic character traits has to be continued up to the conclusion of the treatment; otherwise, one is apt to run into most difficult situations during the frequent relapses at the time when genital primacy is being established. One also should not forget that a definite dissolution of the masochistic character cannot take place until the patient has led an economic work and love life for a considerable period of time, that is, until long after the conclusion of the treatment.

One has to view with the greatest scepticism the success of the treatment of masochistic characters, especially those with a manifest perversion, as long as one has not understood every detail of the character reactions and therefore has not really broken through them. On the other hand, one has every reason to be optimistic once one has succeeded in this, that is, once genitality has been established, even though at first only in the form of genital anxiety. Then, one need no longer be perturbed by repeated relapses. We know that the treatment of masochism is one of the most difficult of our therapeutic problems. It is not possible unless one adheres to that psychoanalytical theory which has an empirical foundation. Such hypotheses as are criticized here are often only a sign of therapeutic failure.

For if one explains masochism by a death instinct, one confirms to the patient his alleged will to suffer; what corresponds to reality and alone guarantees therapeutic success is to unmask the will to suffer as a disguised aggression.

We have mentioned two specific tasks in the therapy of masochism: changing masochism back into sadism, and progression from pregenitality to genitality. The third specific task is the elimination of the anal and genital spastic attitude which, as described, is the acute source of the suffering.

It goes without saying that this presentation of the masochistic process is far from solving all problems of masochism. But once the problem of masochism is again seen in the framework in which it belongs, that of the pleasure-unpleasure-principle, the path to a solution of the remaining problems, which was blocked by the hypothesis of the death instinct, is again open.

A SEX-ECONOMIST ANSWERS, PART 2*

By THEODORE P. WOLFE, M.D.

Q. 14. Is it not true that if children are encouraged to indulge in sex play that they will actually have intercourse at the ages of 9, 10, etc.? Isn't this harmful?

A. This question, to begin with, betrays misunderstanding and sexual anxiety. The misunderstanding is, that, according to sex-economic principles, children should be "encouraged to indulge in sex play." Children don't need any encouragement to do so. They engage in sex play anyway. What should *not* be done—and what is constantly being done—is punishing children or making them feel guilty about it. That is, infantile sexuality should not be interfered with. On the other hand, they also should not be "encouraged." The statement that children should be "encouraged to indulge" in sex play or masturbation, a statement which is constantly being imputed to sex-economy, has an irrational background, inasmuch as any mother, nurse or teacher who says so has not overcome her guilt about her own infantile sexual activities. She *knows*, intellectually, that the child should be free in his sexual activities, but her own—largely unconscious—guilt feelings make it impossible for her to assume a free, rational, that is, un-guilty and un-compulsive attitude toward them. She then tries to overcome her own guilt feelings by an overcompensation: the child should not only be *allowed* to masturbate, but even "encouraged" or "taught" to do so. Such encouragement or teaching would be not only senseless, but dangerous and harmful. A healthy child will masturbate with satisfaction. A sexually inhibited child, with a disturbed pleasure mechanism, will only be brought into still more conflict by such teaching or encouragement.

Finally, will they not "actually have intercourse at the ages of 9, 10, etc.? Isn't this harmful?" This question betrays the old fear of adolescent sexuality, which in turn leads to the fear of infantile sexuality. If we are interested in perpetuating the present sexual regime, in which the majority of people are orgastically impotent, in which neuroses, perversions and sexual crimes are rampant, then it is only logical that children should not "indulge in sex play." For if infantile sexuality is suppressed, it will be relatively easy to suppress adolescent genitality and make the adolescent accept the patriarchal demand of abstinence until marriage, a marriage, furthermore, according to the demand of lifelong monogamy.

If, on the other hand, children are "encouraged" or "taught" to indulge in sex play, it may very well be that they will try to have intercourse even at a preadolescent age. This corresponds to such phenomena in the adult as neurotic promiscuity, sexual brutality and other attempts to overcome a sexual inhibition.

If, finally, children are brought up according to the principle of self-regulation, without interference with their natural needs, they will, in adolescence, establish a normal genital sex life.

Q. 15. Why is it that some children do not walk until two years of age, whereas other children commence to take steps at the age of 8 months?

A. This will largely depend on the degree of freedom of motility which the children are allowed from the very first days of their lives. If babies are packed tightly in their cribs or carriages, or forced to lie in unnatural positions (*cf.* "Disastrous fads in infant upbringing," *This Journal* 1, 1942, 276 ff.), they will take much longer to develop the ability for locomotion than others who were free to develop their natural motility.

It is, however, not a matter merely of such mechanical restrictions. At least equally important is the development of the child's vegetative mobility, that is, the untrammeled development of the pleasure in his own body. This presupposes noninterference on the part of the parents with everything that has to do with the pleasure mechanism: full gratification of oral needs (nursing, sucking), the child's playing with his own body, the genitals included, and full satisfaction of the child's need for affection. It goes without saying that a child who has maintained and developed the pleasure in his own body will also develop the pleasure in using it for locomotion at an earlier date than a child who has lost this pleasure in his body and therefore feels less of an impulse to explore the pleasure possibilities furnished by locomotion.

Q. 16. At what age should "sex" be explained to children?

A. If you are not afraid of your own sexuality and the child's questions, the child will answer this question for you. That is, the child will ask questions whenever it is ready to ask them, and will go on asking them as long as you are ready to answer them honestly. There is no such thing as "sex" that could be "explained" at any given time. The very question, as it is put, portrays the attitude of the average individual who dreads the subject and wants to "get it over with." It is not a matter of "sex" as a subject, but a matter of all kinds of sensations, fears, doubts, activities, and questions of the most diverse type. One child may ask a certain question at the age of 3, another may ask the same question at the age of 5, one adolescent at the age of 11, another at the age of 14. It must be remembered that children often put their sexual questions not directly, but in a symbolical or otherwise disguised form. Thus, a child will ask about the content of a hollow space (box, closet, etc.) when he really means to ask about pregnancy. The adult must be able to recognize the significance of such questions and to answer them accordingly. Most children soon give up asking these questions because they soon find out that the questions are being evaded or answered untruthfully. It is interesting to note, in this connection, that the British Government recently recommended giving up telling children the stork story. This is an official recognition of a fact which has been obvious to many for a long time: the result of such sexual "enlightenment" is only confusion on the part of the child, a deep distrust of the adults, and often, as the result of the repression of a strong sexual curiosity, a severe intellectual impairment.

Q. 17. My little boy, age 5, is a continual source of embarrassment to me. Very often when I have guests he will stare at them and say, "I don't like you." If they try to pet him, he will hit them. How can this be overcome?

A. Here we have to distinguish two entirely different situations. *Either* the child's dislike of your guests is normal. In that case all that is wrong in the situation is that it is embarrassing to you; but there is nothing wrong with the child. On the contrary, his behavior may merely indicate that he is free and uninhibited in the expression of his feelings. This makes him, of course, a "behavior problem" from the point of view of conventional behavior. A "well-behaved" child would not express himself like this; his behavior would be more like that of the conventional adult who is nice to people's faces and then, after their departure, tells the other guests what he "really thinks of them." With the acquisition of this "good behavior," the

* *Cf.* A Sex-economist answers. *This Journal* 2, 1943, 158 ff.

child also loses its natural way of reacting toward people.

It must be remembered that children are extremely sensitive to the armoring and to false behavior in adults. Babies will refuse to be picked up by certain individuals, no matter how "nice" they seem to be. It will always be found that such people are strongly armored individuals who are incapable of an immediate contact with the child and who, instead, try to establish a pseudocontact along the "baby-talk," "da-da-da," "aren't-you-a-cute-cute-little-baby" line. Because such people have lost the natural contact with the child, they cannot take the child seriously and are apt to treat babies as toys. Children do not want to be "petted" in this fashion but want to be loved. If a child hits an adult who "tries to pet him" in this fashion, this may be a perfectly normal reaction, comparable to that of a dog who will snap at a mean person who tries to pet him while he will enjoy being petted by a loving person. On the other hand, children will react immediately in a positive way to a warm, radiating person who is not neurotically armored but capable of an immediate contact with the child. Later on, as a result of neurotic armoring, the child loses much of this immediate contact and of the ability to size up people. It is very interesting to compare different adults' reactions to a new person. An armored individual will say, for example, "What a *nice* person!" while a healthy individual will immediately feel that this "niceness" is not genuine but a front which covers up a great deal of meanness. In addition, he will see direct evidence of the meanness, such as a hard expression in the eyes, a clenched jaw, a rude remark couched in nice terms, etc. All these manifestations remain hidden to the armored individual because he has the same mechanisms of insincerity in himself; if he could see behind the other person's mask, he could no longer maintain his own. That is, the lack of sensitivity for the other person's character is in direct proportion to the rigidity of one's own armor.

As we have said, your boy's dislike of your guests may be normal. *Or* we may be dealing with an entirely different situation: the child is neurotic, and his behavior toward your guests is not a rational reaction to their personalities but the expression of a neurotic hatred, perhaps with the intent to embarrass. In this case the child will need treatment.

Q. 18. My little girl refuses to share her toys with the other children, yet tries to grab as many of the other children's toys as she can. She always wants to have more than she can possibly use. How can I make her stop this?

A. There is no way of making her stop this except by giving her a basic satisfaction she is lacking and for which she tries to make up by this behavior. What that lack is could only be determined by a thorough study of the child and her environment.

Q. 19. My little boy is 2 years old, and still refuses to move his bowels in the toilet. I certainly started to train him early enough. When he was 4 months old I started to put him on his pottie regularly. For a short time thereafter, he moved his bowels in the pottie. But suddenly he refused to do this and insists on moving his bowels in his pants. I cajoled him to no avail. Then I began to punish him. I thought that this was going to work because he kept his pants clean, but also he did nothing in the pottie. This led to constipation and the necessity of cathartics. Now I am at a loss as to what to do. What can you suggest?

A. This unfortunate story is one of the common outcomes of premature bowel training. There can be no doubt that you did not start to train him "early enough," as you say, but *much too early*. After a temporary compliance, he began to rebel against this compulsion and showed his rebellion in the form of anal spite, by defecating in his pants. Later he stopped this for fear of punishment, which led to a spasm of the anal musculature and constipation. That is, a refusal to defecate turned into the inability to do so.

The further outcome depends on how the boy will weather the vicissitudes of the next phase of development, the genital one. If his masturbation is not interfered with by the environment, he may be able to overcome his anal spasm, and his constipation will disappear. On the other hand, it must be remembered that an anal spasm is never an isolated phenomenon; that is, it always involves the whole pelvic floor and the genital also to a lesser or higher degree. This may make genital gratification impossible in which case the anal spasm, and with that, the constipation, is more than likely to persist. In this case, vegetotherapeutic treatment would be indicated.

Q. 20. Children have sweet, pure and simple minds. If the sexes are mixed, and they are allowed to take their clothes off and play together, don't they begin to get "dirty" ideas?

A. What do you mean by "dirty" ideas? If the children have "sweet, pure and simple minds," where will they get the "dirty ideas"? Certainly not from taking off their clothes and playing with each other. If they get such ideas, you can be sure that there were adults around to whom the naked body and sexuality is something "dirty." That, unfortunately, will be so as long as children are brought up antisexually so that they grow up into orgastically impotent individuals who will inevitably implant "dirty ideas" in their own children.

Q. 21. Won't there be danger in attempting to apply didactically to children principles which Dr. Reich has formulated through vegetotherapy with adults only? (Question from an individual who has been aware of the difficulties encountered by psychoanalytically oriented teachers in nursery school work.)

A. This question seems to be based on the argument that what one finds in the vegetotherapeutic treatment of adults does not apply to children. This argument is erroneous. For vegetotherapy deals with basic biological functions which are the same in the adult and the child. Furthermore, one deals with vegetative and psychic reactions which were acquired in childhood and which, in the course of the treatment, are traced back to childhood. One often sees an adult react, psychically and somatically, in exactly the same manner in which he acted at that time in his childhood when he acquired a particular attitude or a particular spasm. This infantile behavior is not "deduced" or "guessed at" as in psychoanalysis, but one actually sees it before one's own eyes in an unmistakable manner, and the patient does not have the slightest doubt about the infantile nature of the experience. Thus, one constantly learns about infantile behavior and reactions from the vegetotherapeutic behavior of adults. In addition, the vegetotherapeutic experiences in adults are amply confirmed in nursery school observations of children.

Nevertheless, something like the danger suggested in the above query exists. Only, it is not the danger of applying principles which are not valid for children. The danger lies in the "didactic" application of sex-economic principles. If, for example, the average teacher, after having read The Function of the Orgasm or a few articles in the Journal, should begin to "apply" sex-economic principles to children, this would indeed be dangerous. For to work with children on sex-economic principles requires more than a theoretical knowledge. It requires the capacity on the part of the adult for self-regulation and pre-

supposes sexual health. Any genitally healthy teacher or parent will work on sex-economic principles even though he may never have heard of sex-economy. He will live these principles and need not "apply" them. Nobody who cannot live them should try to "apply" them. One does not walk "according to the principles of gravitation"; *one simply walks*. If one is paralyzed, one is not helped in walking by "the principles of gravitation."

Q. 22. Is it possible that the orgone accumulator does one good by mental suggestion?

A. If this question is meant seriously, why don't you try an experiment? Build yourself a cabinet, say, of wood, of the same size as an accumulator, sit in it, suggest to yourself that it will do exactly the same thing as the orgone accumulator, and see what happens.

Q. 23. If you follow Dr. Reich's theories, what are you going to do with your child practically speaking when he is adolescent? Give him contraceptive information?

A. Here we have again the fear of adolescent sexuality. It is as if people said: "Well, these theories of Reich are quite all right, as long as they don't have any practical consequences. But suppose we took them seriously? Suppose my adolescent boy wants to have sexual intercourse?"

Well, suppose he does? Adolescent boys have always wanted sexual intercourse and always will. They have reached sexual maturity. But now, all of a sudden, when adolescents want sexual intercourse, "Reich's theories" are being made responsible for it. This is like making Galileo responsible for the earth's moving around the sun, or making Newton responsible for gravitation. Reich's "theories" are not an ideology or a program but merely the formulation of clinical and sociological findings. Such a finding is the fact that the adolescent, as a result of sexual suppression, develops the typical "puberty neurosis" and a sexual inhibition which may make it impossible for him later to establish a happy sexual relationship. Reich never said that adolescents "should" have sexual intercourse. He stated that the antithesis is not, as commonly stated, that between abstinence and sexual activity, but between a healthy sex life and an unhealthy sex life, and investigated the conditions and results of sexual health and unhealth. As a result of the prevailing sex-negative teachings of moralistically prejudiced people, you may believe that sexual abstinence is harmless. In that case, you will most likely tell your son that he should "wait until marriage." If, on the other hand, you are convinced of the correctness of sex-economic findings and of the harmfulness of sexual abstinence, you will help your son to establish a normal genital life. This presupposes, of course, that you are free from genital anxiety, have maintained a natural contact with your son, and that he is structurally ready for it. Then, why would you *not* give him contraceptive information?

Q. 24. I consider myself pretty normal and happy but I don't masturbate nor have I ever had a desire to. What does Dr. Reich say about that? (Question from an unmarried nursery school teacher.)

A. Your statement that you never had a desire to masturbate points to sexual repression. Every child masturbates or has the desire to masturbate; any normal individual has the desire to masturbate in the absence of genital gratification in the sexual act. Your statement, then, means that you repressed the memory of your infantile masturbation and are repressing your genital desires now.

Your question sounds like an argument: "See, Dr. Reich, I don't masturbate, never even had a desire to. I don't have sexual intercourse, and never had a desire to. *That shows* that sexual gratification is not necessary in order to be healthy and happy." Well, you don't say that you are happy and satisfied; only that *you consider yourself* "pretty normal and happy." A great many people in our society solve their sexual conflicts by repression, become unaware of their sexual needs, cultivate substitute gratifications and consider themselves "pretty normal and happy." Behind such neurotic fronts of *apparent* happiness one often finds a deep unhappiness, depression and resignation which, in the treatment, first have to be uncovered before the way is open to genuine happiness.

Furthermore, this apparent "happiness" is deceptive in another way. You may be able to deceive yourself and your environment, but you cannot deceive your biological organism. You can assume a *psychic* attitude of happiness and may sincerely believe that you are happy in spite of your sexual abstinence. This belief can be sincere because you have repressed your biological needs and have made them unconscious. But though they are removed from consciousness, they are not removed from existence. It is not a matter of ideas, but of energies, energies of which the organism, if they are denied a normal outlet, has to take care in some abnormal way. The result will inevitably be some sort of physical symptom or disease, like colds, fatigue, rheumatism, back pains, or cancer. These, when they occur, you will consider "organic" diseases which have nothing to do with your sexual abstinence, because you do not see the connection between the two. And yet, this is the form in which your unhappiness, which exists regardless of your psychic front of happiness, expresses itself.

Of course, everybody is entitled to his own way of solving his sexual conflicts as far as he is concerned as an individual only. If, however, as a nursery school teacher, one has a good deal of responsibility for the children's future health, the story is different. Nursery school children will quite naively display their sexual curiosity and will engage in sexual plays. The healthy teacher will take these things as normal manifestations of the child's vitality and will not treat them differently from any other manifestations. The sexually repressed teacher will be horrified and will try to ignore these sexual manifestations for they remind her of her own infantile sexual activities the memory of which she tries to suppress. In this way, she is excluded from contact with the child in one of the child's most important sectors of his life. The child will inevitably sense this fear in the adult and the lack of contact, and will more or less withdraw his confidence and affection. Or the teacher does take cognizance of the child's sexual manifestations, considers them "bad" and tries to prevent them, either by "diverting" the child to "harmless" activities or by punishing it. In either case a full emotional contact with the child is lost; in the latter case, the child loses its naturalness, becomes vegetatively rigid and develops the basis for a neurotic character.

In his book, DIE SEXUALITÄT IM KULTURKAMPF, Wilhelm Reich relates the following little episode from a Russian kindergarten which illustrates the blind spot of sexually repressed adults for the sexual manifestations of children: "Talking with the head teacher, I looked out of the window and watched the children playing in the garden. A little boy was taking out his penis and a little girl was watching it. This happened at the very moment when the head teacher was assuring me that in *her* kindergarten 'such things' as infantile masturbation and infantile sexuality did not happen."

Q. 25. What does Paul Martin mean in "The Dangers of Freedom" by the term "official morality"? (Question asked by Prof. of Philosophy interested in Semantics.)

A. By "official morality" is meant that

morality which postulates an antithesis between nature and culture, nature and morals, sexuality and work; which suppresses the sexuality of children and adolescents and thus leads to neuroses, perversions, promiscuity and sexual crimes, the very things which it purposes to do away with; which condones "marital duty" and condemns sexual happiness outside of legalized marriage; which penalizes abortion but prohibits contraception; which, finally, among many other things, by robbing people of their vegetative motility and, with that, of their native intelligence, produces people who no longer have any contact with real life and therefore retreat into the world of words. (*Cf.* General Semantics: The Mysticism of Words, *This Journal* 1, 1942, 180 ff.)

Q. 26. Would it be possible for me to observe Dr. Reich's work with muscular tensions? (Question asked by a therapist in children's speech disorders who is aware of the muscle tensions and that they move around.)

A. This is a misconception of vegetotherapy which we have already pointed out repeatedly. Our therapeutic technique does not consist in "work with muscular tensions" in the sense of a "relaxation therapy" or massage. It is *character-analytic* vegetotherapy. That is, the vegetative energies are released from their anchoring in the musculature not by work on the muscular tensions, in any mechanical way, but by the systematic analysis of the character attitudes which express themselves in—or, rather, are identical with—muscular attitudes which, in their totality, form the muscular armor.

Q. 27. Our culture doesn't tolerate sex relations in adolescence. Aren't you going to make it very hard for your child if you bring him up this way (that is, without sexual repression)?

A. There are two fundamentally opposite principles of education: the one is that of *adjusting* the child to society as it is; this is the patriarchal, authoritarian way; it is based on sexual suppression which makes the child capable of submission to irrational demands and incapable of rational rebellion against intolerable external circumstances; it does not take into account primarily the happiness and the health of the child.

The other principle is that of *self-regulation*, where education is guided by the natural needs of the child and where the primary goal is the child's happiness and health. The objections to this principle are based on the fear that a child so brought up will be antisocial and that if such an education were general we would have sexual chaos.

Now, what is the fate of a child brought up under one or the other of these systems, when he reaches puberty? Do we, if we bring up the child according to the principle of self-regulation, "make it very hard for him"? In order to answer this question, we have to get away from generalities, first of all. Let us put the question this way: Is it harder for the adolescent than had he been brought up in an antisexual, authoritarian manner? What does puberty look like in the latter case? Certainly, it is far from easy. The repression of his infantile sexuality, the punishment of infantile masturbation, etc., have led to intense sexual anxiety and guilt feelings. However, the maturing of the sexual apparatus brings with it a new surge of sexual feelings. The inhibitions make both satisfying masturbation and the establishing of an adult genital relationship impossible. As a result, the adolescent is constantly tormented by his sexual excitation, by sexual phantasies which interfere with his work, and by feelings of inferiority resulting from his constant sexual preoccupation and his unsuccessful attempts either to obtain gratification from masturbation or to overcome what he considers this evil habit.

Now, is puberty "harder" for the adolescent who was not brought up antisexually? If it is harder, then why? Is it harder because—in contradistinction to the sexually suppressed individual—he is *fully aware of his sexual needs and of the difficulty of gratifying them*? Undoubtedly. But for that very reason is it also infinitely easier. That is, the healthy adolescent finds himself in a conflict with sex-negating society, a conflict which the suppressed adolescent escapes by himself negating his sexuality. But here is the important and constantly overlooked point: This conflict with society is a *rational* conflict. The healthy adolescent knows that he, in his demand for natural sexual gratification, is *right*, and that society, in denying it to him, is wrong. He does not, like the suppressed adolescent, escape this conflict; this is what makes adolescence indeed harder for him. But at the same time he escapes the *irrational*, neurotic conflicts of the sex-suppressed adolescent. It is a common misbelief that healthy people have no conflicts, that they are always happy, that nothing really hurts them, that they live in some sort of Utopia. Far from it. They do have conflicts; they are capable not only of happiness, but also of profound unhappiness; they are made to suffer by many things which rebound from the armor in which the neurotic individual is encased. But *rational* conflicts usually can be solved in a rational manner, while irrational conflicts, based, as they are, on unconscious factors, are usually impossible of solution without therapeutic help or exceptionally favorable circumstances.

Thus, if you bring up your child according to the principle of self-regulation, he will be exposed to certain conflicts with authoritarian society which the sex-suppressed individual escapes by adjusting to the demands of this society, albeit at the expense of his capacity for happiness. On the other hand, having retained his vegetative motility and a great deal of free energy, he will also be better able to deal with these conflicts. Therefore, it cannot be said that because the adolescent, by being brought up in the sex-affirmative manner, is exposed to certain conflicts with society, he should, for this reason, not be so brought up.

Q. 28. Isn't it dangerous to teach a child aggression by meeting his aggression with return aggression? How can we hope to have a peaceful world if we encourage children to take such liberties? Won't encouraged aggression produce anarchy?

A. Who ever said one should "teach" children aggression? This misinterpretation belongs in the same category as that with regard to "teaching" or "encouraging" children to indulge in sex play (*cf.* Question 14, *supra*, p. 62). In addition, there is the typical confusion here between *aggression* and *destructiveness* (*cf.* Wilhelm Reich, The Function of the Orgasm, p. 130 ff.). Aggression is *normal*: it means, literally, "approaching things and people"; it is the necessary prerequisite for the gratification of any vital need. Because it is so often erroneously equated with "badness" and "sexuality," this normal aggressiveness is usually suppressed in children with the result that they become unable to approach people, tasks and life in general with a healthy decisiveness and courage. Instead, they become submissive, scared, lame and undecided.

What you are referring to is not aggression but *destructiveness*. This, in contradistinction to aggression, is not a primary but a *secondary* drive, resulting from the frustration of normal needs, particularly the sexual ones. The methods of education prevalent in our society will inevitably create destructive impulses. The children are frustrated at every turn in the gratification of their natural needs and prohibited from expressing their natural feelings. The result is destructive impulses. While the principle of self-regulation applies to the

normal, primary drives, it does not apply to the secondary impulses. For if these secondary, pathological drives were allowed freedom, we would indeed have anarchy. In fact, the existing world chaos is due precisely to a breakthrough of poorly suppressed destructiveness. If a child is allowed to develop normally, if it is allowed to gratify its healthy drives, it will not develop secondary drives such as destructiveness. If, on the other hand, the healthy drives are suppressed by moral regulation, it will develop destructiveness. This has to be suppressed by moral regulation and authoritarian measures. We find ourselves in a vicious circle: moral regulation creates pathological drives, and these call again for moral regulation. The only way out of this vicious circle is, of course, the liberation and gratification of the healthy primary drives; because it does away with the secondary drives, it makes moral regulation unnecessary. Certainly, in an older child this liberation of the primary drives will not be possible without treatment because the suppression of the healthy drives has become part of the neurotic character, of the character armor.

The question illustrates another thing: the fear of the adult of his own aggression and destructiveness. That is, "should one get angry with a child?" Yes, *if* the anger is rational. In that case, a healthy child will sense the justification of the anger and take it as the normal reaction on the part of the parent which it is. But the average adult, as a result of sexual stasis, has a good deal of destructiveness in him which he has to suppress and which, in spite of the control exercised, will often break through at the slightest provocation. In such a case, the child will feel that the outburst of anger on the part of the parent is out of all proportion to the provocation, which, of course, it is. This will make the child insecure as it never will know what little thing may lead to such an outburst. The adult, on his part, is equally insecure because he never knows which of his anger reactions are rational and permissible, and which are irrational and need to be suppressed. The constant presence of destructiveness creates the inability to express normal anger reactions.

IRRATIONALISM IN THE FIGHT AGAINST SEX-ECONOMY

III. ON A COMMON MOTIVE FOR DEFAMATION*

By THEODORE P. WOLFE, M.D.

In November, 1943, the Editor was invited to appear before the *Board of Censors* of the Medical Society of the County of New York, of which he is a member, the matter under consideration being his "connection with the Institute for Sex-economy and Orgone-Research." At the meeting of the Board of Censors on December 9, 1943, it turned out that a physician had written to the Board saying that a patient had made the following statements to him, and that they should be investigated:

a) this Institute advocates promiscous sex relations among married and unmarried people;

b) this Institute advocates the concept that children should be encouraged and taught to masturbate.

In reply to the Board's question whether these statements were correct, the Editor pointed out that the activities of our Institute, its concepts and what it stands for, are a matter of public record, the *International Journal of Sex-economy and Orgone-Research* now having been published for 2 years. He pointed out that, as far as infantile masturbation is concerned, our concept is that it should not be interfered with; and as far as promiscuity is concerned, that our Institute advocates the exact opposite: a *healthy* sexuality.

On December 15, 1943, the Editor wrote the following letter:

INTERNATIONAL INSTITUTE FOR SEX-ECONOMY AND ORGONE-RESEARCH

Dr. Wm. Crawford White, Secretary
Board of Censors
Medical Society of the County of New York
2 East 103 Street
New York, N. Y.

Dear Dr. White:

As requested by several members of your Board, I am sending you, under separate cover, the issues of the *International Journal of Sex-economy and Orgone-Research* published thus far. With regard to the questions brought up at the meeting I would like to call your attention to the article, *Sex-economic "Upbringing,"* vol. 1, p. 18ff., and to the statement, *Warning against the misinterpretation of "sexual health,"* vol. 2, p. 197.

As I told you at the meeting, our Institute is familiar with defamations and irrational accusations. They are made by professional people who have no objective arguments against our scientific findings and therefore resort to defamations, and by neurotic individuals who have their own irrational motives. In the present case, these motives are easy to understand. The informant of the physician who wrote to you is the husband of a woman who is undergoing vegetotherapy. She has authorized me to give you the background from which the statements in question arose. The marriage has been unhappy for

* Third in a series of articles on Irrationalism in the Fight against Sex-economy. Cf. I. Biophysical functionalism and mechanistic natural science, by Wilhelm Reich. *This Journal* 1, 1942, 97 ff., and II. The Fascist newspaper campaign in Norway, by Gunnar Leistikow. *This Journal* 1, 1942, 266 ff.

years. The question of separation or divorce had come up repeatedly, but because of her neurosis, the woman was unable to do anything about it. Her husband, along with protestations of his love, treats her badly. Up to now, he was able to get away with this because of masochistic tendencies in his wife. Now, that she is getting healthier, the husband is afraid that she may become unable longer to put up with an intolerable situation and may seek a separation from him. This man, although a talented and well-trained professional man, has not supported his wife and children but has essentially lived on her money. If a separation should occur, he would have to work and make his own living.

This, then, is essentially the motive for his distortion of our views which led to the action of your Board.

I trust that the perusal of the JOURNAL will answer any further questions you may have. If not, I shall be glad to answer them in writing.

Very sincerely yours,
Theodore P. Wolfe, M.D., Secretary

The following passages from the *Warning against the misinterpretation of "sexual health"* bear repeating here:

> It happens again and again that biopathic individuals who lack the feeling for the difference between *natural love* and *sexual activity motivated by secondary drives*—a distinction which we have emphatically set forth—confuse "sexual health" with sexual libertinism. It has to be said again and again that sex-economy has nothing to do with the propagation of a way of living which consists in the libertine enjoyment of socially irresponsible pleasures . . .
>
> Our Institute advocates the gratification of a *healthy* sexuality and not of a sick sexuality which is characterized by lack of seriousness, by lasciviousness and by the lack of the readiness to take full responsibility for one's happiness in love . . .
>
> The organized emotional pest only waits for the chance of showing that we only talk of natural happiness in love but that we actually, as the bearers of the emotional pest would like to have it, "propagate immorality."

On December 18, 1943, the Editor wrote the following letter to the informant of the physician who had written to the Board:

> I have had to appear before the Board of Censors of the Medical Society of the County of New York as the result of a letter written to the Board by a physician to whom you made certain statements. These statements, among others, were to the effect that
>
> a) our Institute advocates promiscuous sex relations among married and unmarried people;
>
> b) our Institute advocates the concept that children should be encouraged and taught to masturbate.
>
> You will realize that such statements are libellous. I am writing to ask you whether you maintain these statements to be true and are willing to defend them, or whether you wish to retract them as untrue.
>
> I would appreciate your answer by return mail.
>
> Very sincerely yours,
> Theodore P. Wolfe, M.D., Secretary

This letter has remained unanswered. That is, this informant, like all rumormongers, is a coward. He has neither the courage to stand up for his statements, nor the decency to admit that he is in error. On the other hand, he has continued to go around to various people agitating against our Institute. As he put it to an acquaintance of his: "I'm out for Dr. Reich and Dr. Wolfe, because they have broken up my home."

This brings us to an issue which has to be made clear once and for all: *We*—that is, the Institute and the therapists associated with it—*are not responsible for the personal everyday actions of patients, of the readers of our publications, or of anybody else.* If, for example, a patient, in the course of the treatment or afterwards, decides to obtain a divorce or to enter a new

relationship, he or she does so at his or her own responsibility. We are not an ideological group which would try to impose its ideas on other people; we do not meddle in other people's lives. Our only task is that of helping the patient to get well. If, in the process of getting well, the patient comes to the conclusion that an existing marital situation is intolerable, he may, as far as we are concerned, decide to continue it or to discontinue it. The only time we interfere is when such a decision seems to be based on irrational motives; in that case we point out these motives and have the patient consider them. A patient may, for example, want to get a divorce at the time he realizes that his marriage contains an incestuous element, that his attitude toward his wife is to some degree determined by his—previously unconscious—infantile attitude toward his mother. Such a divorce, at this time, would be irrationally motivated. It would represent what Freud, I believe, called "the flight into actuality" and would prevent a solution of the infantile conflict. It would mean to "pour out the baby with the bath." First the patient will have to solve the infantile conflict. Then, after this is eliminated from his marital situation, he will see it without the infantile admixture, for what it really is. Then, he will find either that the marriage was based to such an extent on an infantile mother fixation that, after its elimination, there is not enough left to carry on; or, he may find that only now has an adult relationship become possible. At any rate, we tell a patient neither to get a divorce nor not to get it. We only try to make the patient solve his irrational conflicts which interfere with the rational solution of his problem. The decision, however, remains his own. People get divorces anyway. But if they do it after having worked through their irrational attitudes and have lost their neurotic hatred, they will do it more decently and without the disastrous consequences of neurotic hatred.

All this is really so self-evident that it should not even be necessary to mention it. What makes it necessary is the irrational reactions of people who are incapable of regulating their own lives, and who, out of a feeling of their inadequacy and their incapacity to take the responsibility for their own lives, shift the responsibility to us and make irrational accusations. A few years ago, one of our co-workers, Paul Martin, happened to spend some time in Oslo. At the same time some unmarried girl there became pregnant. Her mother ran to the police and demanded that Martin be expelled from the country because, as she said, "had he not been in the country, the girl would not have become pregnant." Martin did not know anything about the girl, and she probably had never heard of him. This may be an extreme example, but the others are no less irrational. Children have always masturbated. But now, sex-economy is being made responsible for it: It happened, also in Norway, that attempts were made to have Wilhelm Reich indicted in court for "seduction of children" because he affirmed infantile sexuality. Adolescents have always wanted to have sexual intercourse. But now "Reich's theories" are being made responsible for it. Homes are broken up and divorces are obtained every day of the week. But now our Institute is being made responsible for it. The home of our rumormonger who "is after Dr. Reich and Dr. Wolfe because they broke up his home" had been broken up for years. This was, in fact, the principal reason on the part of his wife for seeking therapeutic help. But he is incapable of or unwilling to take the responsibility for his marriage and to do something about it. So he shifts the responsibility to us and spreads slanderous statements about us. It is to be hoped that our readers, when they come across similar incidents, will recognize this mechanism of the emotional pest.

NOTES

RATIONAL AND IRRATIONAL DISCUSSION OF ORGONE BIOPHYSICS

One often hears it said that the field of natural science is free of irrationalism, that neurotic, irrational thinking is found only in mentally disturbed people. This, of course, is erroneous. The basis of irrational thinking is the biopathic character structure. Since the overwhelming majority of people have such a character structure, it goes without saying that the field of natural science is not exempt from irrational thinking. One cannot distinguish between natural science on the one hand and biopathic thinking disturbances on the other. One can only distinguish good natural science and poor natural science. The good scientist is that researcher or professional specialist who is aware of the irrationalism in his thinking and in his work, who knows and masters it. The poor scientist is the one who denies the general existence of irrationalism and limits it to psychiatric patients. As a matter of fact, one meets irrational thinking no less frequently in scientific circles than in the so-called lay circles. This is so for the following reasons: Every scientist has his "personal equation." He feels every statement which limits or corrects his specialty to be a threat to his person or profession. For this reason, his "criticism" is often irrational; its motivation has nothing to do with the objective facts. Often, the specialty serves the purpose of personal self-assertion. Inferiority feelings, sexual disturbances, professional inadequacy are drowned out by a dignified attitude of knowing everything or of knowing everything better, or by rigid, sterile, academic "scepticism." In many cases it is simply the fear of uttering an independent opinion which makes the scientist behave in an unscientific manner. In other cases the fear of so-called public opinion interferes with the formation of scientific judgments. The following two groups of queries make clear the difference between rational and irrational discussion.

A. RATIONAL DISCUSSION

Q. If cancer is due to stasis and stifled cells caused by lack of sexual gratification, how can a little boy of 5 develop cancer?

A. In formulating this question, the fact is overlooked that "sexuality" is not restricted to the adult, but is a quality of every living organism and every one of its cells. Therefore, a boy of 5 can suffer from sexual stasis; in fact, most children at this age do. Children between the ages of 3 and 5 go through a period of intense sexual excitation. If their pleasure mechanism, in particular, their masturbation, is disturbed, they develop a chronic biophysical contraction, and with that, the biopathic basis of cancer is established. But there is another possibility for a child to develop cancer. If the mother, during the pregnancy, had T-bacilli in her blood, she may have transmitted them to the child, thus predisposing it for cancer. This process is not "hereditary" in the strict sense of the word, but a true infection; an infection not with cancer cells—which are not infectious—but with the T-bacilli which may give rise to cancer.

Q. If a cancerous cell disintegrates into T-bacilli and strongly blue PA bions, why doesn't the strong radiation destroy the T-bacilli?

A. The blue bions do in fact kill the T-bacilli. But in this process the bions lose their orgone charge and disintegrate *themselves* into T-bacilli; for this reason, the number of T-bacilli, instead of decreasing, *increases*. In the fight against the T-bacilli, the organism uses up large amounts of its orgone energy; this expresses itself in the process of cachexia. In orgone therapy, we provide orgone from the *outside*, so that the organism does not have to deplete its own energy reserves. This is the principle of orgone therapy in cancer.

Q. If the more strongly charged cells absorb the energy of the weaker ones, why do the strong healthy cells lose their vigor in the fight against cancer? Or are the disintegrating cell nuclei so strongly overcharged that they draw on the energy of the healthy ones?

A. This is a highly pertinent question to which there is as yet no definite answer. It is true that the strongly charged cells or bions kill the T-bacilli according to the basic law that the stronger orgonotic system withdraws energy from the weaker system. But it is also true that in this process the cell or bion *itself* disintegrates. This is an observable fact. Why this is so cannot definitely be stated at present.

Q. What biological explanation is there for the well-known experience that one is definitely attracted physically only by one person out of, say, 100, out of which 80 will leave one completely indifferent and the rest are even repulsive?

A. The biological explanation of this phenomenon is the fact that more than 80 out of 100 people are orgastically impotent. Genuine physical attraction takes place only among this minority. If, instead, the majority of people were sexually healthy, sexual attraction would be correspondingly common, and it would be that much easier for people to find satisfactory sexual partners. Many people fear that in that case there would be increased promiscuity. The exact opposite would be true. The generally prevalent *neurotic* promiscuity would then disappear, because its basis, the frantic search for a suitable partner on the part of a frustrated organism, would be eliminated, and there would be a basis for healthy, more lasting relationships. It is necessary to point this out again and again because the moralists continue to argue that sexual chaos would ensue if people were sexually healthy.

Q. As to the inhibitions of the respiratory organs: I was thinking about it long before I heard about vegetotherapy. I knew people developing this kind of inhibition only after having started to share their beds with a loved person. The one case was a young man whose unsuspecting parents slept in the next room and no noise was to make them suspect, the other was a young wife who lived with her husband in a boarding house where connecting doors were covered with the wardrobes only. The third case was a very lively young woman whose (phallic-narcissistic?) husband would mock her about her cries in orgastic moments. In the end they separated and within a year her respiratory inhibitions ceased nearly completely. Can the causes indicated here be the right ones?

A. The causes you mention are important in that they aggravate and anchor orgastic impotence; but they are not the *primary* causes. The primary causes lie in the sex-negative upbringing of children which causes pleasure anxiety and a general contraction of the biological system, and, with that, incapacity for sexual gratification. Healthy people who managed to escape the effects of these primary factors are better able to arrange their lives in such a manner that the *secondary, social* factors you mention do not play any decisive role. On the other hand, it is a fact that most people live under very poor sex-hygienic conditions which they are unable to alter either for reasons of their neurosis or for purely socio-economic reasons. It goes without saying that sexual gratification is impossible under conditions where one has to listen for fear of being disturbed or has to watch oneself for fear of being heard.

Q. A man of over 40 with hypotrophia adiposogenitalis whose cells ought to be undercharged, who ought to be easily at-

tacked by diseases, mental and physical, was in fact never ill in his life (apart from some ateroma of the scalp). He is in fact a man of wide interests, high intelligence and rather happy in a contemplative way. He is a much appreciated creative artist who finds great delight in his work. How does all this conform with the findings of the Institute?

A. This question cannot be answered conclusively because we have had no vegetotherapeutic experience with hypotrophia adiposogenitalis. But it can be assumed that it is just the *under*charge, that is, the absence of overcharge or sexual stasis, which makes such an individual "contemplative" and "rather happy." We have every reason to doubt that this is a genuine happiness as it results from a deep satisfaction of the biological system. Character-analytic experience shows that there is a kind of *superficial* happiness which covers up a deep depression and resignation. Besides, it should not be assumed that every undercharged organism of necessity develops a shrinking biopathy.

B. IRRATIONAL DISCUSSION

Argument: If the orgone radiation is present everywhere, it cannot come directly from the sun and is not restricted to organic matter. It would have to be shown that where it does not exist, life is not possible.

Answer: From the statement that the orgone energy is present *everywhere* it follows logically that it *also can* come from the sun. The "critic" apparently has not conscientiously studied the article on the discovery of the orgone. For there it was said that cellulose and other organic substances, when subjected to direct sun radiation, absorb an energy which causes—without friction—a deflection of the electroscope. The statement that the orgone energy is "not restricted to organic matter" sounds like a criticism of a contention which was never made, namely, that the orgone energy appears *only* in connection with organic life. If the "critic" had really studied the article, he would have found that it was described as a specific biological energy which governs living matter and *"would have to exist in non-living nature, independently of the living organism." (Cf. This Journal* 1, 1942, 114, point 2, 3, and 10). More than that, the functioning of the orgone in the realm of the living *as well as* the non-living is postulated there; it has already been demonstrated in the realm of the non-living.

Argument: Must the living organism receive the radiation as nourishment, and does the presence of radiation effects in the proximity of strongly vital cells simply mean an excess in radiation, or is the radiation produced by the living organism? If so, out of what? From other kinds of radiation or from caloric energy?

Answer: If the orgone energy is described as the "specific biological energy"; if it is pointed out repeatedly that "something" has to be added to the non-living protein in order to make it pulsate; if pulsation is the basic manifestation of living matter, the question answers itself: Orgone is not a "nourishment" which has to be taken up by the organism like protein; it is *the principle of living functioning itself*. Our "critic" fails to combine the various manifestations into a whole. Once the first error in thinking is made, namely, that there is a living organism *here* and an orgone energy, which is taken up as "nourishment," *there*, any number of erroneous conclusions follow automatically: then, the radiation (though it is the *specific* biological energy) can be "produced" by living systems which exist by themselves, i.e., *without orgone*. Then, orgone can derive from other kinds of radiation or from caloric energy, and we are caught in mechanistic thinking according to which a living organism can, by itself and *ab ovo*, exist without a specific bio-energy, and according to which it eats "in order to produce" orgone energy. This is metaphysical thinking. According to this thinking, the orgone energy appears as a thing separate from life, and a superfluous luxury, as it were, for a living organism is assumed which is a living organism even in the absence of orgone. In this way, things become hopelessly complicated. For now we have discovered a "specific biological energy" which first has to be produced by a living organism which is governed by *another* principle. This deprives it of its essential character, that of being *the* life energy. Thus, the problem of the life energy remains unsolved. That is, our "critic" fails to comprehend the simplification of the whole biological problem which results from the discovery of the orgone; he fails to use *it* for a re-orientation in the hitherto not understood caloric and other functions of the organism. He attempts to derive the orgone energy from the secondary life manifestations, instead of reducing the mechanical and chemical phenomena to a functioning life energy. Thus he comes to speak of a specific biological energy which has nothing to do with living functioning.

Argument: The simplest assumption would be that the living cell differs from non-living matter in that it produces a specific radiation. One need not assume that the sun has anything to do with it.

Answer: There is no reason why this assumption should exclude the role of the sun. (In addition, the solar origin of the orgone has been *demonstrated*.) That the living function has something to do with the sun energy has been evident in all branches of natural science for a long time; only, it was not known what the connection was. The discovery of the orgone provides the answer: The orgone functions in the organism, but also in its non-living environment, and it also comes from the sun. To exclude the sun does not simplify but complicate the problem which was solved by the discovery of the orgone. For in this case the living organism must again be invested with an *unknown* energy. Thus, one cannot say that it would be "the simplest assumption" to exclude the sun; more than that, doing so would be like building and furnishing a house after having lived in the jungle, and destroying it as soon as it is finished.

Argument: It could be that the living cell emits a specific radiation, but that it derives the energy for this radiation somehow from the sun (secondary excitation, fluorescence).

Answer: This formulation is correct except for the word "fluorescence" which has nothing to do in this context. What is wrong is not the formulation, but its proclamation in the form of a correction or amplification of the article under discussion. For the article states precisely that which the discussant seems to introduce as a new thought: namely, that the organism radiates an energy which it derives from the sun (in the narrower sense of direct sun radiation and the wider sense of the derivation of all matter and energy from the sun). One cannot proclaim a statement under discussion as *one's own* contribution.

Argument: As to the flickering in the sky. The night sky shows a certain degree of light even between stars. This can be explained purely astrophysically (diffuse light). The flickering is light and change of brightness: the light is explained astrophysically and the change of brightness terrestrically.

Answer: In the article, the flickering in the sky was explained by the newly discovered orgone; the interpretation by "diffuse light" was explicitly refuted as incorrect. Now, if somebody provides a new interpretation (orgone) for a known phenomenon, the critic must prove a) that the old interpretation was adequate, and

b) the flickering has nothing to do with the orgone.

The old interpretation of the flickering must adduce contentions from various fields, that is, it is *complicated*. The concept of "diffuse light" itself demands an explanation. What is "diffuse light"? Similarly, the terrestrial "change of brightness" would have to be explained itself before it could possibly explain the flickering. The atmospheric orgone, which is visible and measurable, makes these complicated assumptions unnecessary. Our critic prefers to adhere to the complicated and unsatisfactory and overlooks the advantages of the new discovery which makes all the previous complicated assumptions unnecessary. He thinks of "terrestrial magnetism" and forgets that nobody has as yet found out where this "magnetism" comes from, what it is and how it comes about. Incidentally, the "flickering of the stars" can also be seen on a planetarium sky, as a result of the movement of the orgone, as well as in the orgone accumulator.

Argument: One experimenter tried for a full 45 minutes to see the flickering in the dark, but with negative result.

Answer: It is quite impossible to judge a discovery such as the orgone by sitting in the dark *once* for 45 minutes. The discoverer spent several hours daily in the dark for 2 years before he was sure of his findings. In order to make it easier for others, he constructed an orgone box which makes the seeing of the orgone quite simple.

Argument 1: How can a radiation be demonstrated objectively?
Photographic plate: existence
Spectroscope: wave length
Photometer: energy
Polarisator: polarization, coherence.

Argument 2: If it is a matter of corpuscles:
Mass spectrograph: mass and velocity
Electromagnetic field: charge.

Argument 3: With regard to points 1 and 2, the various tests for penetration would have to be carried out (glass, quartz, aluminum foil, monomolecular metal foils).

Argument 4: Experiments in vacuum should be carried out in order to exclude absorption.

Answer to points 1 to 4: This critic shows a methodological ignorance which seems incredible in a scientific specialist. Such argumentation is similar to the following:

A psychoanalyst tells an experimental psychologist that the child has a sexuality. The psychologist objects as follows: "You cannot make such a contention. First you have to make Wundt's test XYZ." Or: A mountain climber attempts to climb Mt. Everest (a task which lends itself well to the comparison with orgone research). He has to find an altogether new path. Another mountain climber hears about it and says: "But that's nonsense. Why doesn't he use the railway to the Jungfrau?"

This critic either has not read the article or has not understood it at all. It was stated explicitly that usual routine methods were not applicable and that they had failed; that it was a matter of a *fundamentally new form of energy;* that methods for its investigation had to be worked out; that some positive photographic demonstrations had been achieved; that further experimental results were forthcoming; that the newly discovered energy is present *everywhere* and therefore cannot be delimited; that, consequently, it cannot simply be investigated with apparatus which are adapted only to delimited manifestations such as radium rays. This specialist did not take the trouble to use the arrangement described in the article in order to learn to see and observe the energy before forming opinions.

Argument: With regard to the motion of luminous vapors: If it is a matter of rays, these would always move at a tremendous speed; only the emitters can move slowly like vapor.

Answer: The contention that, if it is a matter of rays, *slow* movement is impossible, shows a prejudiced attitude. First, the fact that known kinds of rays move rapidly does not permit the conclusion that the existence of a slowly moving energy is out of the question. Second, in the monograph, EXPERIMENTELLE ERGEBNISSE ÜBER DIE ELEKTRISCHE FUNKTION VON SEXUALITÄT UND ANGST, the slow movement of the biological energy was demonstrated photographically (some of these photographs were reproduced and described in THE FUNCTION OF THE ORGASM, 1942). Third, the problem of the slowness of biophysical movement (e.g., of the intestines), as contrasted with electromagnetism, was specifically mentioned (FUNCTION OF THE ORGASM, p. 339 f.). Fourth, it seems in itself unlikely that an energy moving at the speed of light would govern the living processes, since the slow, wave-like organic movement must of necessity be thought of as an expression of the biological energy. Fifth, the investigation of the movement of the orgone energy is still in process. An objection to the effect that it might be better not to speak of "radiation" in the case of the orgone would have been more reasonable.

Argument: The electroscope experiments are not done exhaustively enough; there are any number of possible variations of the experiment.

Answer: This criticism is premature. It was said explicitly that the experiments are being continued, and that the publication of the findings is going to be continued.

"NUTTIER THAN A FRUIT CAKE"

The following review of Wilhelm Reich: THE FUNCTION OF THE ORGASM was written by Martin Grotjahn and published in *Psychosomatic Medicine* 5, 1943, 309 f.:

Anyone who limits his reading to the study of scientific books is warned against Wilhelm Reich's new book "The Function of the Orgasm." Other people, however, who read not with deadly seriousness, but with an adventurous spirit might try to read it. They should know from the beginning that the book is most certainly nuttier than a fruit cake. It is intended as a scientific contribution to psychosomatic medicine. Actually it is a surrealistic creation. It is published by the "Orgone Institute Press" which is the publishing house of the "International Institute for Sex Economy and Orgone Research." It is not the translation of the German book which W. Reich published in 1927 under the same title and which became a landmark in psychoanalysis as a therapeutic and scientific technique, deeply influencing almost the entire generation of younger psychoanalysts. Now W. Reich is beyond reason and has peculiar dreams about "bions" which are primitive living organisms created in a test tube. The radiating energy inhabiting the bions is called "orgone." Their energy is derived from sand, but was later found to be present in the soil, the atmosphere, the sun radiation, and in the living organism. The orgones look blue according to the author who claims to have seen them. Pleasure and anxiety are the basic excitations or emotions of the living substance. The bio-electric functioning of emotions makes them part of the general electric process of nature. On the basis of this general frame-work the medicine of the future is conceived. There is no doubt that some of the details on these 368 pages arouse the same fascinating interest with which an analyst listens to the strange associations of a patient.

A SEX-ECONOMIC PREDICTION COME TRUE

In Die Sexualität im Kulturkampf, 2nd ed., 1936, Wilhelm Reich wrote the following:

> If one is to avoid "sexual chaos" and the necessity of establishing punitive measures against homosexuality in the army and navy, one will have to tackle one of the most difficult problems of social sex-economy: *the inclusion of female youth in the life of the army and navy.* As inconceivable as this may sound to the military specialists today: there is no other way to prevent the undermining of sexuality by army and navy life. Obviously, there is no simple solution to this problem, but the principle is clear.

This postulate of the inclusion of female youth in the life of the army and navy was derived from the study of social sex-economic conditions and developments. It seemed, at the time of writing, a most difficult problem the recognition and practical solution of which could be envisioned only in the distant future. Yet, only a few years later, in the second world war, it became a reality in the democratic countries: the sex-economic necessity of the inclusion of the women in the armed forces proved itself.

One might argue that this inclusion of the women has nothing to do with sex-economic processes; that, rather, it resulted merely from the military necessity of freeing males for active service. No doubt, this is also a reason for it. But this reason was equally valid in the first world war; yet, the inclusion of woman in the armed services did not take place then. Since the first world war, however, such far-reaching changes in a positive direction have taken place in the sex life of youth that the social sex resistance was simply overrun. From the standpoint of mental hygiene the inclusion of female youth in the armed forces is to be welcomed because it will reduce the disastrous effects of military life on the sexual apparatus and on emotional life in the sense of brutalization.

True, the *sex-economic* basis for female military service was never openly admitted or even advocated by the responsible authorities. But the bearers of the emotional pest had an inkling of it and—as is their wont—attacked it with defamation, both in England and in America. The reaction of the people on the whole was rational. The slanderous attacks of the asceticists and moralists were thrown back. One could only wish that the sex-economic motivation of this progressive social measure were openly admitted and advocated.

REVIEWS

Nathan, Peter: The Psychology of Fascism. London: Faber & Faber, 1943.

The application of psychology to sociology, if successful, rests on the following prerequisites:

1. Can it explain the functioning of the human psychic apparatus (clinical psychology, sex-economy)?

2. Does it lead to practical social measures (mass psychology)?

3. Does it take as its starting point the plasticity of human drives which, taken by themselves, cannot determine human behavior any more than they can *voluntarily* be modified and developed? (Functionalism; refutation of the erroneous concept of an antithesis of nature and culture.) As Malinowski stated: "Culture refuses to run riot."

These three prerequisites lead to

4. The elimination of an erroneous psychologism (social facts are not projections of the psyche). "The application of psychology is nothing but a recognition of the various intermediary links between the economic process and the behavior of the people who live in it." (Wilhelm Reich.)

The author has not asked himself the above questions. This makes his Psychology of Fascism a futile production, particularly if we remember that it was published in 1943. To him, fascism is a product of the "German psyche," a projection of an over-severe conscience, the overcompensation of a national inferiority feeling. Quite apart from the loose thinking expressed in such formulations, one must ask: What gives rise to the traits we find in fascist society, such as longing for authority, aggressivity, sexual abnormalities, individual negation of life? The answer to this question presupposes a concrete description of the fascist social institutions, *of life* as it is lived under fascism; it presupposes, further, an examination, in terms of natural science, of their constant influence on the psyche. It is a tautology, pure and simple, to say that fascism "corresponds" to the fascist psychic structure. First of all, sociology must explain the law according to which fascism arose (general suppression and exploitation). But suppression and exploitation are nothing new. What hopes did the masses expect to see fulfilled in fascism? Why was fascism better able to win over the masses than socialism? These are only a few of the basic questions which the author leaves out of consideration altogether. His psychology is a hodge-podge of Freud, Jung, Adler and Stekel. Accordingly, man is viewed as born with aggression, with a need for some deity or other, with mystical feelings which human culture thus far was unable to master and which now appear in the form of fascism. *"There is, then, in our age a mass of mystical emotion which is continually trying to express itself against the wishes of the intellect . . . but now religion has lost its attraction; and so these feelings are forced to express themselves through other channels."* As we see, the author proceeds on the assumption of "ready-made psychological facts." Thus it is small wonder that he keeps throwing around such concepts as sublimation, regression and projection, concepts without which he seems incapable of handling man's "evil nature." Here is the author's own solemn testimony to this incapacity: *"One can say that the price we pay for living in communities is war. Civilization is made possible by a suppression of many of our impulses and desires. This is only achieved, as it seems, by permitting them periodically in a group form. The question whether man will ever be able to remain civilized without permitting these outbursts it is impossible to answer; we can only say that so far he has not achieved it. It is in man's nature to be aggressive, wild, destructive, competitive,*

eager to dominate. These are as much a part of him as his speech, his beating heart, his skilful hands."

This is pseudopsychology plus pseudosociology. Fascism can use exactly the same argument for its subjugation of the masses; in fact, it does use them. Since, however, the author professes to be an enemy of fascism, he has to find his own way of doing away with it. Thus, in the final chapter, he recommends to the nations who in the meantime have become "socialist" to let bygones be bygones, after an appropriate period of time has elapsed. This would be all the easier, the author thinks, in that Hitler has educated the Germans "along socialist lines." It is to be feared that before long the author will present us with a "Psychology of Socialism," in the form of a slightly revised second edition of the present book. Such a socialism, then, would be another one of these periodical outbreaks of the mass psyche.

From this kind of PSYCHOLOGY OF FASCISM we can gain only the one thing: more experience in the scientific refutation of all the psychological and sociological misformulations, a task for which nothing equips us better than Wilhelm Reich's DIE MASSENPSYCHOLOGIE DES FASCHISMUS, written *ten years before* the present book.

HARRY OBERMAYER
Tel Aviv

LEWIS J. DOSHAY, M.D., Ph.D.: The Boy Sex Offender and His Later Career. New York: Grune & Stratton, 1943. Pp. 206.

In these times, when "juvenile delinquency" shows a marked increase and becomes a major concern, a study of the boy sex offender is doubly welcome. The author, a psychiatrist attached to the Children's Courts, New York City, in this study "seeks to establish the significance of early sex offenses among males in relation to later life behavior." For the purpose of his study, the author divides his case material into two groups: the "primary" group of "true sex offenders," i.e., individuals "having no known involvement in any offensive behavior other than sexual" (108 cases), and the "mixed group," representing boys of the "general-delinquent type" (148 cases).

Most of the book is taken up by statistics concerning "family and home factors," "factors in the personalities of the parents," "age distribution and puberty," "race," "nationality," etc. In working through these statistics—a real endurance test—one asks oneself what relevant conclusions could possibly be drawn from these. One also begins to ask oneself, Where is the boy sex offender? Nowhere in the book, not even in the case histories, does one get an impression of the personality of the boy sex offender, of his conflicts and subjective experiences, of his suffering; all this is smothered by "data" about him. One is also struck by the choice of criteria. For example, in Table 10, p. 64, the following items appear under "Behavior Abnormalities": Enuresis, Nightmares, Fear of dark, Conflict with members of family. In Table 11, p. 72, the following are listed under "Types of Juvenile Sex Offenses": *Masturbation, excessive; Group affairs with girls;* and *heterosexual experiences!* The attitude toward such sexual manifestations becomes quite clear from the following quotations:

> Healy and Bronner mention 25 per cent of their delinquents as practicing extreme masturbation, which implies that every fourth case was a serious masturbating problem. These figures serve to reflect the intensity of glandular and emotional excitement among early adolescents, and the great need for proper sex hygiene preparation of juveniles as a protection against still other and worse sex practices, such as appear in Table 11 (p. 71).

That 25 per cent of delinquents practice excessive masturbation is not surprising. But the psychiatrist should realize that these figures do not "reflect the intensity of glandular and emotional excitement among early adolescents" (which means simply brushing aside the whole problem with a platitudinous statement) but the fact that these adolescents have been made incapable of normal, gratifying masturbation. What is really meant by "the great need for 'proper' sex hygiene preparation of juveniles against still other and 'worse' practices" becomes obvious from the following quotation from Rousseau's *Emile* (p. 73):

> My son, there is no happiness without courage, nor virtue without struggle—by virtue is meant strength of will—this need arises with the awakening of the passions.

In other words, "proper sex hygiene" means the suppression of "the passions," of masturbation, by "strength of will." The author's own opinion on the subject is expressed as follows (p. 74):

> Excessive masturbation should be prevented by redirection of the glandular and visceral energies into channels of vigorous muscular activity, by sports, competitive games, and athletics, as well as wholesome mental preoccupation with an abundance of social interaction.

So, it is a matter of "glandular and visceral energies." This would imply that it is a matter of normal energies which should have a normal outlet. But no. They should be "redirected" into non-glandular and non-visceral activities, sports, competitive games and "wholesome mental preoccupation." That excessive masturbation should be prevented, is, of course, correct. But not because it is a moral "evil" but because it is a symptom of unhealth. The only rational prevention can be the elimination of its cause. This is the inability of the adolescent to have a normal discharge of these "glandular and visceral," that is, sexual energies.

The author's comment on "Group Affairs with Girls" is the following (p. 76): "These occurred in only 3 cases of the primary group, and in none of the mixed group. They were of the mild petting and inspecting nature, and occurred in a group of children on a roof adjoining a school." He fails to state the "offensive" nature of these activities.

As to *Heterosexual Experiences,* these "include instances of sexual intercourse with adolescent girls and women and occurred in 12 cases of the primary group, or 11.1 per cent, and in 11 cases, or 7.4 per cent, of the mixed group." The attitude toward such occurrences is one of horror. The author goes on to say, "Rousseau (who from his own life's experience must have known) declares, in his classic treatise *Emile,* that 'his horror of adultery and debauch keeps him at a distance from prostitutes and married women, and the disorders of youth may always be traced to one or the other.'"

As to the *Causes of Sex Delinquency,* the author finds that "the findings of the study warrant the axiomatic conclusion that no trait, or combination of traits, operates as a specific cause of juvenile sexual delinquency. A variety of causes, of both extrinsic and intrinsic origin, are elicited from the case records" (p. 80).

"Most significant among the extrinsic or determining causes are lack of proper guidance in sex hygiene and inadequate protection of children by parents" (p. 80). As we have already seen, what is meant by "proper guidance in sex hygiene" is sexual suppression pure and simple.

"Puberty is the most important of the intrinsic causes," continues the author! "Puberty thus strongly contributes to the commission of sex offenses, but, without benefit of extrinsic factors, the force of puberty would not of itself eventuate in the commission of the sexually delinquent act" (p. 81). This sounds like double-talk. Of course, puberty, by itself, if undisturbed, would lead to the establishment of a normal adult sex life. What makes this impossible and leads, instead, to neuroses,

crime and perversions, is what is here called "extrinsic factors." What this array of "extrinsic factors" comes down to is, of course, sexual suppression in all its various forms, which makes a healthy sexual development impossible. The mention of this fact, however, is carefully avoided.

In view of this moralistic, antisexual approach to the problem, one would not expect much of a constructive conclusion from this study. Yet, the conclusions are so incredible that they have to be extensively quoted.

"A highly significant indication of this investigation," writes the author (p. 168 ff.), "is that male juvenile sex delinquency is self-curing, provided the latent forces of shame and guilt, inherent in the moral-cultural pattern, are properly stimulated into action. Under such circumstances a boy's mental faculties are shaken to their very foundation, strong reservoirs of shame are dislodged from attachment to the inactive memories of infantile rectal and bladder control days, and powerful self-generating barriers against recidivism are laid down in the personality, which effectively and lastingly resist a return to sexual offenses. This seems to occur regularly when a sex offense is exposed to a boy's family in the open process of a juvenile court and clinic hearing. No other conclusion seems possible from the outcomes, and the following substantiating findings. Thus, it is common observation for aggressive and calloused juvenile offenders to employ various excuses and defenses in attempts to justify even the most violent general offenses; yet never has a boy appeared in the clinic who sought to *justify* a sexual offense, however insignificant."

The author illustrates by the case of an 8-year-old boy who said: "Why shouldn't I steal the bicycle? Why should the other kid have a bicycle and me not? He's no better than I am. Why, look at Russia. There everyone is given the same things. What about the bankers, where do you think they get their money? They steal it, that's how they get rich. Look at all of them that's been caught and sent to jail." This same boy, however, "when faced with a petty sex situation on a later day, figuratively melted away. There was not a sign of defiance in his manner or speech. There was no berating of the community as unfair, nor any attempt to justify his act. . . . He felt exposed and stripped of all protection, even that of his parents, who themselves now were gravely concerned over the disgrace to the family and what the neighbors and relatives might think if they should learn of their son's 'depravity.'"

"The success of the court and clinic contact in checking sexual recidivism," the author continues, "does not arise from the direct influence of these agencies, but rather from the circumstance that they effectively serve to provoke into action the *internal self-curing processes of shame and guilt*. The precise value of the court in the process rests in its facilities for an impressive exposure of the sex offense to the mind of the boy, with members of the family and strangers about, in the open court procedure, with the addition of the benefits derived from psychiatric reorientation by the clinic. These measures seem to provide the fullest opportunity for arousal of the strong latent currents of shame and guilt, which, with little outside assistance, thereafter can continue to operate within the ego and superego, as a continual fortification of the individual against sexual recidivism."

"The study thus successfully brings to light previously unknown basic principles that should prove valuable in the treatment of boy sex offender cases by others besides the courts. Any close approximation of the conditions above postulated, on the part of community psychiatric practitioners, agency workers, or even parents, would probably meet with similarly good results."

Under the heading "Treatment" the author states the following:

"The findings indicate that juvenile sexual offenders should preferably be brought to court and into the court clinic, in order that they may obtain lasting benefits from maximum stimulation of the inherent self-curing potentialities of shame and guilt, . . . and every effort should be made to institute effective measures that will arouse an adequate response of guilt and shame in the boy, as a means of laying down permanent deterrents in his mind against recidivism."

Freud has shown that neuroses, perversions and sexual crimes result from sexual repression, from the shame and guilt about sexuality which is instilled in children and adolescents. Could it be that the author, an experienced psychiatrist, is ignorant of these facts? He is not. For on p. 178 f. we read the following statement which, in the context of this book, strikes one as rather surprising:

> We adults, through our own stupid system of so-called social and economic cultural progress, not only rob the adolescent of his natural right to function as a mature male upon reaching puberty, by surrounding him with laws, taboos, fears, guilts, and restrictions that spell for him sexual inhibition until he is old enough to satisfy our conventional concept of marital responsibility (which is usually at an age past 25) but we lack the decency even to provide him with the needed understanding of his sex functions, so that he may at least achieve a reasonable artificial adjustment to his enforced celibacy. In the manner of ostriches, we make no visible recognition of his sex problems, his visceral cravings, not even his simple need of enlightenment and guidance, by which he might bear his sexual abstinence less stressfully, and view his urge to the substitute sex gratification of masturbation, which comes spontaneously to every boy, in the proper light of control and sublimation, instead of with a plagued mind, guilt, misgivings, misunderstandings, hate, and in terms of stray bits of street information.

So, the author is aware of our "stupid system of so-called social and economic progress," of the fact that we "rob the adolescent of his natural right to function as a mature male upon reaching puberty," of the fact that, "in the manner of ostriches, we make no visible recognition of his sex problems, his visceral cravings." And yet, he proposes a systematic "arousal of the strong latent currents of shame and guilt."

That such a procedure may in fact reduce recidivism of sexual delinquency cannot be doubted. But it is a more than dubious procedure. There are two basically different methods of handling antisocial sexual drives and activities: self-regulation, and moral regulation. *Self-regulation* would require the exactly opposite procedure of that proposed by the author: the adolescent has to be *freed from* his guilt feelings and sexual anxieties, he has to become capable of an adult genital life or at least able to masturbate without guilt feelings and with satisfaction. Then, when his primary sexual drive is satisfied, he will no longer develop secondary, perverse and antisocial sexual drives.

The other procedure, that of *moral regulation*, works on the opposite principle, that of re-inforcing the existing feelings of guilt and shame and of instilling new ones. True, this may have the effect of reducing recidivism, but at a horrible cost, that of *psychic castration*. An adolescent who becomes sexually delinquent is already sick. If re-inforcing his feelings of guilt and shame reduces recidivism, it does so only because such treatment has made a *sexual cripple* of the adolescent.

If the author, in spite of his knowledge of the disastrous effects of sexual repression, nevertheless advocates such a procedure, it can only be because he finds himself in a dilemma: As a physician he knows that the adolescent should be freed of his guilt feelings and that he has a "natural right to function as a mature male upon reaching puberty." But apparently as

the psychiatrist of the City's Children's Courts he cannot say so. In that position, he takes the side of society, of what he himself calls "our stupid system of so-called social and economic cultural progress," as against the adolescent who is in dire need of help.

So it comes to pass that Freud's discoveries are put in the service not of the patient, but of sex-negating and sex-suppressing society. This utilization of the knowledge of the mechanisms of suppression, of shame and guilt, has for many years characterized psychoanalytic pedagogy.

In his preface, the author states:

> An important field of social concern has seemingly been neglected. In line with this are the pointed remarks of an outstanding exponent of child guidance work: "I don't understand sex delinquency. Nobody understands sex delinquencies. Some day we may . . ." (W. Healy), and also the more recent remarks of a noted sex authority: "In our present state of ignorance with regard to sexual matters . . ." (G. W. Henry). Evidently psychoanalysis has not fully supplied the answer on the subject of sex, as many have been led to believe.

One cannot agree with these statements. Psychoanalysis *has* supplied the basic answers to the problem, and Reich's sex-economy has expanded and amplified them, particularly with the clarification of the primary and secondary drives. It is not true that "nobody understands sex delinquencies." The knowledge is there. One can no longer hide behind "our present state of ignorance with regard to sexual matters." It is no longer a matter of acquiring the knowledge, but a matter of drawing *the correct practical conclusions* from this knowledge. That, however, takes a more than ordinary degree of honesty and courage.

T. P. WOLFE

EXCERPTS FROM

A. S. NEILL'S "THE PROBLEM TEACHER"

Editor's note: *This continues the excerpts published in vol. 1, 1942, pp. 180-184, 282-288, and in vol. 2, 1943, pp. 198-204.*

HEAD AND HEART IN THE SCHOOL

There are broadly two ways of looking at a class of children. One is to see a group of heads: the other is to see a group of hearts. That the teacher usually sees only the heads is not his own fault. The system believes in heads and he has to work within the system. His only concern is with that part of the anatomy extending from the neck upwards.

It is unnecessary for me to give proof of the interest in heads, for the blackboards and textbooks afford all the proof needed. What is more important is to give proof of the absence of interest in hearts. Let us take an imaginary example—John Smith, aged fourteen, sitting at a desk. Let us ask his teacher what he knows of John Smith. The answer might be something like this:

"Oh, Smith? Not a bad chap, but inclined to be lazy. Careless worker and very untidy especially with written work. But I admit he is good at geography and is keen on it. Bit of a nuisance in class: you know, distracts the attention of the others. Arithmetic fair to middling; reading dreadful; drawing not so bad, but his spelling is unbelievably bad."

Such a reply tells us nothing of any importance about Smith. It is unlikely that his teacher could answer these questions about him:

What about his home life? Has he brothers and sisters, and if so how does he get on with them? Or with his parents? Do they lecture him or punish him? Are they religious? Do they quarrel? Have they favorites in the family? What does John know about sex? Does he masturbate with a guilty conscience?

Do you know anything about his ambitions and his daydreams? What fears does he have . . . animals, the dark, death? Is he sincere in his attitude to life, or is he a little hypocrite? Have you asked him what he would do if he had a hundred pounds? Have you tested his values by asking him questions like this: Who is more important, a doctor or a soldier? Jesus or Napoleon?

I could think of a hundred further questions for his teacher. It is obvious that my questions go much deeper than any questions about ability in lessons, obvious that they deal with heart and not head, obvious, too, that they would interest John profoundly. They would touch the real John, not the shell of the classroom.

I want to see every school a place in which every teacher knows the essential things about every child, that is has an emotional interest in the emotions of every child. There is a difference between talking to and talking with, between being in front of a class and being in a class. You cannot see anything from the teacher's desk.

It should be made possible for every teacher to have frequent contact with each child individually, sitting face to face as friends in a private room. The tragedy of many a child's life is that he has no one to confide in. His parents are not the people, for there is an emotional barrier between parents and child; if he has not the chance to confide in his teacher there is no one else he can go to. Here I am taking it for granted that his teacher is not an authority to be feared, not one who is considered a detective by the child. The least touch of authority or dignity in a teacher makes it impossible for him or her to help

a child in any emotional difficulty. You cannot address a man as "Sir" and confess your troubles to him.

Nor should the teacher be an adviser. His role should be a receptive one, that of a sympathetic listener. I do not say that he should be completely negative. If John Smith confessed to me that his conscience was worrying him because he stole a packet of fags from an automatic machine with a dud foreign coin, I should be inclined to smile and tell him about similar ventures in my own life, not in order to console him, but only to convince him that he was talking to a fellow sinner, that is, talking to an equal and not to a top-hatted superior. Guessing that his stealing was the result of unhappiness I should then encourage him to tell me about his home life and his feeling of being unloved or unjustly treated. Here any moral attitude would be fatal. If a teacher said: "But, John, it is your duty to love your brother," or a similar platitudinous inanity, the emotional reaction of the boy to his teacher would be a hate one, and his chance of progress would be much lessened.

It is so necessary to realise that you cannot teach anything of value by speaking. This is so true of moral education . . . "But, dear, surely you must know that your sister feels pain when you hit her with that stick." . . . "But don't you know it is wrong to steal?" . . . (or worst of all) "God does not love little boys who pull the cat's whiskers." Such remarks never cure the child; they make him more defiant. At the same time I do not say that these remarks have no effect at all; unfortunately they sink into the unconscious and their cumulative effect is to make a personality that hates life. The law makes the crime, and morality makes the sin.

Am I asking too much of the teacher? I don't think so; all I ask is that he makes the effort to understand the child, to side with the child, always to be on his side. I am asking the teacher to belittle symptoms and seek for root causes. It is a hard and difficult task; it will have successes and failures, because sometimes the root cause of a trouble is beyond the help of the teacher.

I contend that every teacher in every school should know as much about each child as I have to know in Summerhill. After all I have 75 of them, more than any State school class, but I confess to the advantage of having them in the school all the time. The disadvantage of this is the price I pay in noise and nerve strain for the privilege of living always with children. I confess too that my time is not compulsorily devoted to teaching lessons and correcting exercise books. It must be stated, however, that if my ideals of education were the usual ones, I could and would spend my life worrying about reading and writing . . . and heads.

Now the truth is that a great number of teachers agree with the point of view I am now putting forward, especially the younger teachers. They too see the shallowness of head education, and they burn to reform the schools. Some of them come to me in despair crying: "We can't do anything. The Headmaster won't let us move; the Code impels us to deal only with heads; the classroom is a prison."

The teaching profession badly needs an organized Left Wing. Its official National Union of Teachers is not good enough for the new generation of teachers . . . There is the New Education Fellowship which attempts to be an organisation of teachers who want progress, and it does good work. Of late, however, it has tended to be respectable and liberal rather than revolutionary. It never invites me to take part in its conferences because I am "too revolutionary." That I do not mind, for conferences are things I dislike intensely, but it shows how the N.E.F. wind is blowing these days. To me it is a hopeful sign that requests for my lectures come mainly from local branches of the N.U.T., and in all these lectures I find an interest and enthusiasm which is a joy to me.

The organizing of a Left Wing association would not be easy in a profession that is scattered so far and wide. The best way might be to organize first of all something in the nature of the Left Book Club. If any publisher cared to risk the venture I, for one, would gladly help on the editorial committee . . . This Book Club would ignore completely everything connected with teaching methods and subjects. It would have its weekly magazine which would deal only with psychology, sociology, and sexology. Much space would be given to answering questions sent in by readers, and unknown readers would be urged to send in contributions. . . . The motto of the Club would have to be: No compromise. Life and sex would be dealt with openly and sincerely, although there would be some danger in this, for we are only allowed to deal with sex in a pornographic way as in the music halls.

One enormous difficulty would be to keep the Club clean. I mean by that, keep it clear of cranks and neurotics. Any society that deals with sex is apt to attract many of the wrong sort of people, the unconscious homosexuals and voyeurs and exhibitionists. We should have to fight hard to keep out the man with a bee in his bonnet or a Charles the First's head under his arm. We are all potential dangers. At the moment if I were in control of such a club I might be inclined to over-emphasize the importance of Reich's psychology, while another man might concentrate on Freud or Adler or Krishnamurti or Rudolf Steiner. We should have to seek truth amid a multitude of theories and beliefs, but we could not be too broad-minded: we could not accept a book on, say, The Benefits of Scientific Flogging.

The purpose of such an organization would be to concentrate on the heart instead of the head. It would begin to bring education to where it belongs—the unconscious of the child. It would give teachers a direction into a province that has been too long neglected, and it would enable them to see in perspective the bleak landscape of desk schools.

THE TEACHER AND SOCIETY

I can hear a young teacher say: "What the devil does social status matter?" I am afraid that it matters a lot, especially in small towns and country districts. The teacher in London can be content in his own social status; he is not compelled to feel himself an inferior; his life is not open to all; he can associate with whom he likes. Snobbery isn't being continually thrust upon him. He is lucky in comparison with the teacher in the small town. The latter knows that socially he is a nobody, and having no opportunity of mixing in a class of his own, he is almost forced to measure himself against the local people who form society. He can have no freedom in his life; he must always behave respectably. The London bachelor or spinster teacher can live "in sin" without fear of discovery, but the village teacher dare not be seen giving the glad eye to a barmaid, why it is difficult to understand, for socially he is not considered very high above the barmaid. There are few people who can get away from class distinction. None of us can get completely free from it. . . . Snobbery is like religion: if you get it young you can never get rid of the poison.

It can scarcely be denied that the teaching profession is of greater importance than any of the other professions. The teacher should be a pillar of society, and if he should have no dignity his profession ought to have. There are no teacher peers, no baronets; I never heard of even a teacher knight. No self-respecting teacher would want to have a title or accept one if it were offered to him. The point is that a title is not offered to him because he is not considered valuable enough. In a world of successful motor manufacturers

and brewers the honor goes to the people who matter most. To use a military simile, the business men are like commissioned officers while the teachers are like non-commissioned officers.

I can imagine what kind of a speech some of the younger men could make if they were in the position of the president of the National Union of Teachers. I am not a young man myself, but I should like to give a presidential address like this:

Ladies and Gentlemen,

I have chosen for my presidential address the subject of Truth. I want to make you ask yourselves the question: How much truth is in education? Or the cognate question: Are we living a lie?

I say we are. We have charge of the next generation and we are giving it the lies of our own generation. We are not doing this deliberately; we are doing it because we have never really thought deeply about education. We have not had the power to look ahead; our horizon has been a severely limited one.

Let us make this concrete. Today (1939) we see the nations arming to the teeth. At any moment the world may be plunged in an inferno of despair and terror and agony. It seems highly probable that millions of children sitting in schools today will be killed. When the war is finished what is left of humanity will be faced with the herculean task of building up a new kind of civilization. It will be one that will differ from the present one in many ways; its most probable form will be universal Socialism. Fascism cannot in the end win because it belongs to the old way of life, to profit and class distinction, and imperialistic conquest. It puts the clock back.

The pupils of our schools, those who survive, will build the new world. Are we doing anything to prepare them for this task? What will our little lessons on school subjects do to help them to a new life? Will their silly little examination successes help them to endure the misery they may first have to face? Will that iniquity, home lessons, help to make them conscientious citizens of a new world?

Teachers, if we really believed in truth we should stand together and strike down this system of playing at education. We should train the young to be citizens by allowing them to be free citizens now. When a boy of seven was stealing, our Summerhill citizens government passed a law that he be compelled to steal something every day, else he would be fined his pocket-money. That was citizenship with psychological understanding, citizenship far removed from that of adults who punish by birch or prison. Such children can face a new world with a new spirit, a new orientation to social behavior.

How can we allow children freedom to make the new world when our ruling class decrees what we should teach and how we should discipline? You know you are not free. The mere fact that you have to celebrate Empire Day shows how unfree you are. Empire Day, the celebration of centuries of imperialism, of the kind of robbery that we so violently condemned when applied to Abyssinia by Italy. Empire Day when the millions of India are underfed slaves, when millions of African natives are dispossessed of their lands and freedom. If you are reasonably honest you must realize that you are celebrating a lie, the lie that a nation can be great and just when only the few benefit and the vast majority are exploited at home and abroad.

Teachers, it is your urgent duty to see that the children have the opportunity to see what is behind the pomp and pageantry of Empire. You dare not let them know only the *Daily Mail* side of life, the history book side of life. Don't waste your time with decimal fractions and similar futilities; tell the children what society means, what is behind what they see.

I am asking you to be one-sided because you have so many rival teachers who, like

the devil, have all the best tunes. Most of your pupils go to the cinema. In the news reels they see the superficial side of life—the tanks rolling by, royalty smiling graciously, the prime minister alighting from a Munich aeroplane. The news reel is in its cinema and all's right with the world.

Then they see the capitalistic society story feature, nearly always one where the scene is laid in high society. Only a sincere actress like Luise Rainer would dare to hide her beauty in the rags of *The Good Earth*. Your children see love stories that end in an eternal marriage, played by actors and actresses who change their mates by divorce every few months. They see love scenes that arouse in them sexual emotions that they dare not allow expression in society. They see perverted history as in the film *Victoria the Great* when the corn laws are repealed because the dear old queen was so sorry for the poor. They see a film like *The Shape of Things to Come*, where H. G. Wells makes woman a mere cipher, seeking only love, and where he leaves out the working people. About the only true pictures they see are the Disney Cartoons.

Now the influence of the cinema is greater than that of the school, for the reason that what it acquired through pleasurable emotions has a much stronger and deeper effect on a child than what is acquired in a dull classroom. While you are teaching dull subjects the world outside is educating the children, and educating them in the wrong way. Your arithmetic and history do not give the children a standard of life, but the films do—the soul-destroying standard of Hollywood with its individualism in the center of butlered houses and expensive clothes.

By refusing to face the problem of sex in children, you drive them to the tender mercies of the enemies of life—the preachers and the moralists, so that the future adult is faced with two influences pulling different ways—the ego-centric luxury of film life, and the ego-centric aim to save his own soul.

Teachers, cannot you see that your whole system is out of date? That your school subjects do not touch the life of today? Children learn to read and when they leave school they have no standard of reading; they learn to count and most of them will never have more than their wages to count; they learn of countries they will never see, and they study languages they will never use.

Why do you not teach them what is going on around them? They should know in detail why there is an army of unemployed; they should know what industry means and why the many are poor; they should be told what forces are behind the war-mongering and imperialism of the world. But teaching what will make for good citizenship is not enough. You must kick away all the shackles that bind children, the discipline, the fear, the passivity. You can really only learn by doing, and one public meeting in a school, where every child can speak fearlessly, is worth a hundred talks on citizenship.

Teachers, your job is not in the school; it is in society. Often a kindergarten teacher will say to me: "My children are happy and free and busy all day long, but next year the bigger ones will have to pass on to the desk schools, and it breaks my heart to think that they have this free system for a short time, only to pass into the horrible mill of sedentary desk work and discipline." But, teachers, you are all in such a position; however faithfully you teach, however freely you teach, your children are destined for the mill of industrialism. Really you are in very much the same situation as the man who rears pigs for slaughter, but his is the more honest job. Pigs are at least scientifically fed, while your pupils are unproductively spoon-fed with indigestible hash.

You have the unconscious feeling that education stops at the age of fifteen. I have

said you cannot see the end of your work, yet it is essential that you should. A school should be a place to which old pupils return eagerly and often. It cannot be so long as teachers take the short and narrow view that their job is teaching the alphabet of life's language.

It is not for me to tell you how to alter matters. That is for your social conscience to decide. I can, however, make a suggestion—that you demand to play your part in the emotional life of your pupils and of the world. Thinking, like Nurse Cavell's patriotism, is not enough; the intellectual training of the classroom is not enough. Your job is to get hold of the emotions of the children before the Cinema and the church and the racecourse and the football field win them for ever. Teach the Three R's by all means, but insist on spending most of the time in emotional creative activity. If your children can write and act their own plays I do not say that they won't go to the cinema, but I do say that they will go with a decided standard of their own, go with the critical eye of the artist who writes plays. If they have ample time to play football they will not later be so ready to stand as thousands do content to watch a game. In Norway you will find huge crowds go to watch a jumping or slalom competition, but the crowd is on skis.

If your children are not taught that love is wicked, the lure of the sex appeal film will tend to make conscious their sexual misery, and the morbid compulsion to stare at beautiful screen actresses will disappear.

And if their school life is full of happy creation they will not tacitly accept the factory slavery that awaits most of them. They will have to tolerate it for economic reasons, but their emotional freedom will make them work to better their class's conditions.

Naturally if you demand that creation should be the chief factor in the school you will find yourselves up against the powers that rule you. They are not afraid of what the workers know; they are afraid of what the workers might be. Do not make the mistake of undervaluing your masters. They are wise old birds even though much of their wisdom is unconscious.

Now if you were all united, if you could go in a body to the rulers and say: "We are making our own schemes of education, and we are amending the timetable so that emotional education will come first," your rulers will not require to think this out; they will know, as if by instinct, that there is a danger in your scheme, although consciously they may be quite unaware of the reason why they believe so. Their objection will soon crystallise into rationalisations . . . What! we don't want artists and dancers and writers in our mills and offices. The idea is absurd. Will ten years of drawing and acting make a girl an efficient typist? God knows that the present education is bad enough . . . I can't ever get an apprentice who can spell decently . . . but we do not want a generation of illiterates who can only dance or play games.

To be fair to capitalism it must be said that something like this happened in Russia. It set out with a great gesture of educational freedom, with self-government, creation galore; then gradually it changed; the State said in effect: This is all very well, but we are in a hurry to build up a socialist civilization; we need skilled workers—engineers, teachers, doctors, managers, and we cannot afford to risk the slow process of complete freedom.

Some of you may be doubtful about the importance of emotion. Believe me, and I speak from a long experience, if you educate the emotions the intellect will look after itself. When a boy loses his guilty conscience about masturbation he always learns his lessons more easily and willingly. I use this illustration because, strictly speaking, one cannot educate the

emotions; the most one can do is to try to destroy the bonds that have tied up emotion and changed it into guilt and hate. All you can do is to furnish outlets for emotion, and these outlets should be material rather than human. It is better for a child to be creatively emotional in painting a picture than destructively emotional in hating his teacher, but, if schools had a complete apparatus for emotional outlet on material, hating the teacher would disappear.

Apart from your work altogether you must find your own social freedom. No, that is false: you will find social freedom when you make your work a creative thing worth living for. Your social status will rise as your work status rises. So long as you produce slaves you will be slaves.

Here I want to speak to youth. The world has seen hierarchies, patriarchal and matriarchal rule. Today patriarchal rule is dominant, and it looks as if it were to commit suicide. Is it not possible to substitute for it a rule of youth? Are you content with a state of society that makes a man of seventy its prime minister? That expresses surprise if a man of forty gets a cabinet post? Are you on the side of the old men of Transport House or of the young men of the shops rank and file? It is a question you must face. But to face it squarely and frankly you will have to challenge the conventional view that old men are wiser than you are. It is a lie, a flaming lie, a lie founded on the belief that youth is hot-headed and acts and thinks afterwards, while age is calm and thinks before it acts . . . and usually does not act at all. Ah, but age has had experience!

Here is an excerpt from *Lady Windermere's Fan.*

Lord Darlington. You talk as if you were a man of experience.

Cecil Graham. I am.

Lord Darlington. You are far too young.

Cecil Graham. That is a great error. Experience is a question of instinct about life. I have got it. Tuppy hasn't. Experience is the name Tuppy gives to his mistakes. That is all.

Oscar Wilde was a cynic, but he sometimes went deeper than perhaps he knew. Experience is not a matter of age . . . one can see that in the faces of the children of Barcelona when one compares them with those of children who never knew terror. A guttersnipe boy in London could buy and sell a rustic six times his age. No, age uses its experience to keep the young down, for it fears youth and hates youth. "Children should be seen and not heard" summed up the philosophy of patriarchal society. Unfortunately it also sums up a lot of so-called education at school and at the university. It is a rotten system in which the teacher asks all the questions, and I have every sympathy with the boy who wondered why his teacher asked him the capital of China, since presumably he, the teacher, knew it already. This boy always makes me think of the school cleaner, who, seeing the words, "Find L.C.M." written on the blackboard, cried: "Haven't they found that damned thing yet? They were looking for it when I was a boy." I think both stories contain a fine criticism of education, and I have the feeling that a collection of school stories would make an excellent indictment of our system, for those who could read between the lines.

Teacher should be seen and not heard. That is really your position in society today, those of you who are young. More than half of you young teachers are prevented from teaching in the way you want. And why? Because your schools are ruled by the old men and women. I want to see you young teachers demanding self government for school staffs. I am on the verge of being an old man myself, but I have never once interfered with my staff or told them how I wanted them to teach. When they make the timetable at the

commencement of each term I am never there, partly I admit because I have so little interest in timetables and teaching, but mainly because I feel that they know their own job best. True I have the power to engage a teacher or to dismiss one, for I also am in the way of being a capitalist and an individualist, so that when some members of the staff proposed that the school be changed into a co-operative one, where all were equal, I refused to do so on the ground that I had planned and created the school, and had to retain the ultimate control of policy.

Here you will no doubt be inclined to say: You don't practice what you preach: you tell us to demand self-determination, but in your own school you approve of the rule of the Old Man. I admit the justness of the criticism; I grant that here you have the clinging to power of the Old Man. I constitute the ruling class in my school and like all ruling classes I want to remain master of the situation.

Yet, you know, I have a defense, one, perhaps that is a rationalization like most defenses of autocracy. There is a difference between my school and your schools. You have no choice. Your living depends on your serving the State, and working in the manner that the State demands. My staff come to me freely; they are men and women who prefer to work in freedom for a salary that is a bad fraction of the salary they could get under the Burnham Scale. They are free to live their own lives without pretense, free to love as they like, free to do as much political work as they want to, free to dress as they wish, free to teach as they like.

Most salient of all they believe in the work they are doing, and have no occasion to kick against the pricks. They accept sincerely the psychological policy of the school; they believe in school self-government, in complete freedom to attend or stay away from lessons, in the psychological treatment of behavior in the case of stealing or bullying or destructiveness.

The wish to make the school a co-operative one comes from the most politically conscious of the staff, the socialist element. Naturally they want educational Communism in the school, a communal responsibility. And, you know, they are right, for the future belongs to co-operation. The days of the one man show are passing, and, frankly, Summerhill is a one-man show in this, that prospective parents do not consider my staff when they apply for a prospectus; they apply because they have read my books, and they ask for me when they visit the school. I am always hearing the criticism: "The fault of schools like Summerhill is that they depend on one man's personality and views. Look at the Little Commonwealth: it depended entirely on Homer Lane's personality."

This should not be. And fundamentally is not true. Personalities are important only because they are what you might call milestones on a new road. Their personality does not make the movement; the movement calls forth the personality. Hitler did not make Nazism; it made him. My own work could never have been attempted had I not been influenced by a movement that had men like Homer Lane, Freud, Stekel, Reich, E. F. O'Neill, Edmond Holmes, MacMunn and many others. Personalities are only the scouts of a progressive army, and even when scouts die the army marches on, sending out new scouts. I know that in fifty years my name will be writ in water, but I know that education will have marched far ahead by then.

My view is that movements spring up in the unconscious of the people, so that it is possible to find outcroppings of the new in Europe and America at the same time. In the past these outcroppings have been associated with individuals, but it is likely that in the future they will be associated with whole groups of people.

Today in the international situation we

are inclined to overestimate the value of personalities; the world waits breathlessly for the speeches of a Chamberlain, a Hitler, a Mussolini, a Roosevelt; they appear to have the power of life and death over the world. Yet they are mere puppets, mouthpieces of collective forces that they do not control, that control them. True, one of them can launch a bloody war at any moment, but, if a national leader died, the policy of his nation would go on inevitably to its end.

So it is in education. The upward movement goes on, and the Neills of life are not leaders; they are being led. In the same way the diehards of education are being led, so that the battle is not one between Summerhill and a Public School; it is one between a moving force and a static force, between progress and tradition. You young teachers are many of you unwilling conscripts in the army of tradition, and your eyes are turned to the banners of the new order.

But beware of waiting for a leader. Only the backward forces follow a leader, and in any case the Promised Land is never reached; the tragedy of the leader is that his aims are always negatived by the mass desire . . . There is no end to progress, no Ultima Thule. "It is better to travel than to arrive." Stevenson was profound when he wrote these words. Wilde puts the same thought differently . . . "In this world there are only two tragedies. One is not getting what one wants, and the other is getting it. The last is much the worst; the last is a real tragedy."

Ideals are only dangerous because they are fixed. I sometimes feel I could sell my soul to play golf like Henry Cotton, realizing all the time that, if I could, I should no doubt want to be able to sing like Paul Robeson. No man should ever arrive. Must we then set out on our journey without an aim? Oh, no, but our aim should be the next milestone . . .

I can imagine a youth movement in your ranks leading a campaign to convert parents to your views, meeting them on every possible occasion, and trying to show them your standpoint. To begin with you might try to enlighten them on the subject of child psychology. Millions of fathers and mothers are ignorant of child nature. They have never thought about education, have accepted it as they accept religion or class rule or poverty. I talked to a group of working mothers not long ago, and was most agreeably surprised at their interest and understanding. Some of them had been spanking their children automatically, and were genuinely astonished to learn that there were other ways of keeping discipline in the home.

Then you could try to make the parents aware of the political aspects of education, showing them how inadequate a school education is, how in the narrow sense of preparing for life it is a failure.

At the same time you should fight to give your profession self-determination, and to begin with you might start a campaign against inspection of schools. I have never heard practicing lawyers and clergymen have government inspectors who appear at odd moments to see whether they are doing their work properly. Teachers are on a level with bus conductors. Every time an inspector asks me for my tram or bus ticket I feel that humanity is degraded, for his one function is to discover whether the workers are cheating the company or not; the inspector is the supersymbol of man's distrust of his fellow men. And, camouflage it how we will, the inspector of schools is a spy, a licensed Nosey Parker . . . He is very often, perhaps always, appointed on his academic qualifications; he may know nothing whatsoever about child psychology, nothing about economics. Possibly he may know so much about educational theory that he is incapable of realizing that there should be no educational theory. He may never have taught a class in his life . . . An in-

spected profession cannot help having the social status of tram conductors, and the timid attitude to authority that every tram conductor must have. Many of you fear the arrival of the inspector: most of you must do. Those of you who have had a religious education will fear the inspector wholeheartedly, for to your unconscious he is the inspector of the Judgment Day.

The inspectorate constitutes a significant proof of the wrongness of schooling. You can examine a class in arithmetic which does not matter, but you cannot examine it in character or happiness which do matter . . .

Go on, young teachers. Fight for your freedom, your self respect. Until you get rid of inspectors you will be slaves and inferiors. Scorn the governmental help in methods of teaching: insist that, if any help is to be given, it shall be given by men and women who have something important to give. Let the government send round people who will help you to understand what children are, who will assist you to understand the many psychological problems in your classrooms. You don't need inspectors to tell you how to teach school subjects.

But, the doubter might say, what about the slack teacher? . . . Well, I once knew two village schools about three miles apart; one had a good teacher, the other a bad one. I never saw any evidence that the children from the good school succeeded any better in life than those from the bad one. At the same time I am willing to agree that it is better to have a good teacher than a bad one even when what they teach is not education. But the cure for bad teaching isn't inspection; it is a social conscience in the body corporate of teachers. It is more than this: it is a radical change in the content of education, a change that by making education creative will attract the men and women who are creative. Education today can attract the dullard, because it is essentially work for dullards, for men who are content to teach by rote—robots in a machine-made world.

Ah, but behind the subjects is the real thing in education—the personality of the teacher! Yes, I grant that your personalities are of great importance for good or evil in the school. You can give out love or hate or fear, but as long as your profession is an inferior one you will be in danger of giving out more fear than love, because an inferior always has some fear coming from above—headmaster, inspector, local authority—and this fear is always shunted on to those who are inferior to you, the pupils . . . The motto over the gateway of every school should be: Casting Out Fear, because fear is the greatest curse of life. But only a fearless man can cast out fear, so that as a profession you should contend against all the forces that bring fear into your own lives.

In my daydreams I see the school as the center of the village or town, a club for children by day and for adults by night; a place where fathers and mothers can meet to talk or sing or dance, to work at their hobbies, to read books and magazines, to listen to lectures on all subjects, not only education. I would even give it a club license so that it could compete with the local public houses. It would be Liberty Hall by day and by night. The snag would be that the believers in uplift might wangle the control of it, and make it a higher life center with uplifting educational films instead of Charlie Chaplin, with dull lectures after the style of the lectures so often given in Rural Institutes. And the lady of the manor would have to be told that she could attend only as a unit in the village, and not as a leader of any kind. All dangers, however, would be capable of being faced and overcome by the combined social conscience of parents and teachers. The school would belong to the trio—children, parents, teachers.

International Journal of Sex-Economy and Orgone-Research

VOLUME 3, NUMBERS 2 AND 3 OCTOBER 1944

FROM THE ORGONE AND CANCER RESEARCH LABORATORY

ORGONOTIC PULSATION

The differentiation of the orgone energy from electromagnetism Presented in talks with an electrophysicist *

By WILHELM REICH, M.D.

INTRODUCTION.

The present article deals with the orgonotic pulsation as a *physical* characteristic of the cosmic orgone energy. The relevant experiments demonstrate orgonotic manifestations in the realm of nonliving nature. With that, orgone biophysics takes root in orgone *physics*. The past five years (1939-1944) have shown that the differentiation of the cosmic orgone energy from electromagnetism as commonly thought of was indispensable and fruitful. In the process of this differentiation, a wealth of connections between orgonotic pulsation and problems of biology, geology and astronomy were discovered; they are as yet incalculable, and only a small fraction of them could be organized. I was confronted with the choice of either postponing the publication of the basic facts of orgone physics until such time as all these basic connections are essentially clear, or of delimiting certain problems and of presenting them separately.

In the first case, the presentation of a total picture of the orgone functions would inevitably have been burdened with hypotheses. In the second case, that of piecemeal presentation, the view of the whole is unsatisfactory and often even confusing; there is, however, the advantage that the details of a special realm of functioning can be more sharply drawn. I chose the second way, also in order to collect more differing and critical points of view before attempting to correlate the various aspects of the orgone function into a whole.

I can understand the impatience of my friends who would like to hear of all that is worth knowing as soon as possible. However, the interest of the total work requires the interpolation of several years between the making of a finding and its publication. This is an automatic safeguard against theoretical blunders. From the very beginning of orgone research it has proven valuable not to publish a new finding until it had already developed into an essential new piece of insight. The continued development to a new insight is a confirmation of the previous finding.

The finding that all substances which have been made to swell show a bionous structure was not published until it had already brought an understanding of the cancer cell. The finding of the visibility of the orgone was not published until after the discovery of the temperature differences. When the findings of thermical and electroscopic orgonometry were published (1944), the phenomena of orgonotic attraction and repulsion (1942-43)

* Translated from the manuscript by the Editor.

had already been confirmed. At this time, when I submit the phenomena of orgonotic pulsation for publication, there are already at hand new findings and correlations which derive from the study of the pulsation, which confirm and elaborate it.

These things are being said for a good reason: many of my critics are hasty in their judgment. Thus, for example, in the case of the article, "The Discovery of the Orgone" (1942), the objection was made that I should have used this or that method of measurement, that I should have made this or that additional experiment. We do not have to pay any attention to the sarcastic derision with which the first publications on the orgone were met in certain quarters. It is the reaction of impotent people to something alive.

The presentation of the orgonotic pulsation in the realm of non-living nature is in the form of talks with an electrophysicist. He propounds views and objections which, in the course of years, have been propounded by actual physicists. In some places, I have attributed to him typical textbook opinions. In other places, he raises objections which I had to raise myself in the course of the experiments; in still others, he gives explanations as they derive from the orgone experiments. In other words, our electrophysicist is the personification of many real physicists of diverse orientation. This manner of presentation seemed the best to pave the way to a common meeting ground of orgone physics and electrophysics. The erroneous concepts of my electrophysicist are quite common in the world of physics. It goes without saying that they are not mine.

I would like to ask the reader to be indulgent toward minor errors which may be found here and there. If one cuts through a jungle, one is apt to trip over a root and make a blunder. The pioneer in the jungle does not of necessity have to know the exact chemical composition of the leaves Theoretical physics contains so many *fundamental* errors that it can ill afford to appear in the role of an *intolerant* critic of a young and pioneeringly fruitful science such as orgone physics.

WILHELM REICH.

April, 1944.

1. THE POSITION OF THE BIOLOGICAL ENERGY IN NATURAL SCIENCE.

Electrophysicist (E): A biologist friend of mine told me very peculiar things about your orgone research. He thinks that your bion experiments may prove of great significance for biology; on the other hand he doubts whether the world of classical biology will ever accept the bion theory.

Orgone biophysicist (O): I share his doubts. Orgone biophysics will gain social recognition at first not in the realm of biology, but in the realms of *biopsychiatry and physics.*

E. I don't understand. After all, with psychiatric problems concerning the nature of the "emotions" as your point of departure, you found a way into the *biological* foundation of psychic processes. One would think, then, that the realm of biology would be the first to acknowledge your findings. Do you understand this resistance on the part of classical biology?

O. This question can be answered in a few sentences: Biology, apart from vitalism, has an essentially *mechanistic* orientation. Orgone biophysics, on the other hand, operates *functionally,* in the experiment, its interpretation, and in the formulation of theories. Classical biology finds itself in a tragic dilemma. On the one hand, it operates with *living* processes which it considers sharply delineated from non-living nature. On the other hand, and simultaneously, it attempts to comprehend the life principle by way of methods and concepts which are taken entirely from physics and chemistry, that is, the sciences concerned with *non-living* nature:

Orgone biophysics finds itself at the opposite pole. It assumes the existence of fluid transitions from the realm of non-living to that of living nature. Second, it dispenses, of necessity, with the mechanistic physical conception of living processes. It demonstrates a specific biological energy which governs all living processes on the basis of simple natural laws. This energy, called orgone, governs living as well as purely mechanical natural processes. The functions of this energy make comprehensible the manner in which living matter develops from non-living matter, that is, the process of biogenesis.

E. It was precisely this aspect of your research which made me look you up. I come to you not for electrophysical but for *biological* interests. I have been studying biology on the side, as one collects stamps or plays golf, in order to get a change from my own professional field.

O. I doubt that your biological interest is no more than an incidental avocation. The biologists, left unsatisfied by their own science, seek respite from dry mechanism in physics and chemistry. For the same reason, many physicists and chemists find their way into the realm of living functioning, if not into mysticism. It is striking to see to what extent Newton was taken up with metaphysical and religious problems; at first glance, this seems amazing in a representative of that "most exact of the natural sciences," mathematics. That which is alive in the genuine scientists always searches for the *basic* elements, for the *common denominator* in the natural laws and natural processes. The living is a significant part of nature. Up to now, it was under the care of mysticism and genuine religiosity. Of course, I am referring here not to the officials of natural science, those who are concerned with knowledge which is already *acknowledged;* they are comparable to museum guards who watch over statues. I am referring to the *genuine researcher,* the one who strives to get beyond his own limited field, the one who attempts to find the place of his special field in the unitary natural process.

E. Obviously, there has always been a tremendous need for the simplification and unification of the scientific world picture; unfortunately, the efforts in that direction were futile. Rather, the increasing specialization of the various branches of research and their concern with detail work had the opposite effect: that of leading natural science farther and farther away from its real goal, that of simplification and unification of natural processes. The natural philosophers, charged with this task, also soon became specialists: specialists in speculation and in the attempt to solve the riddle of the common denominator in nature by pure thinking. Natural philosophy also failed in this task. The cry for integration of the natural sciences means little as long as the process and the function are not found which comprise all natural processes in their totality as well as in their individual functions.

The specialists of today are poorly trained in methodical thinking. They cannot co-ordinate the details into a whole. It is as if thousands of builders were to build a magnificent structure without having a plan for the whole. Thus the front door does not fit the staircase; there are magnificently furnished rooms lacking an entrance; the water pipe leads into the chimney; the bedrooms are in the lobby and the reception room on the eighth floor. The result is utter confusion. One does not see the woods for all the trees, and one does not see the natural process for all the words. When the tenants moved in, there was war, for—all improvements of modern technic notwithstanding—nobody could find his way around.

O. I usually demonstrate to my pupils and friends the difference between mech-

anistic word-science and functional natural science by way of a very simple illustration.

E. Let's hear it.

O. Take a primitive who enters a modern living room and sees a chair for the first time in his life. What will be his immediate first question? "What do you call this?" or "What do you do with it? What is it made of?"

E. The latter, of course. To begin with, he would not ask about the name, because a word, such as "chair," would not tell him anything about the function or nature of the sitting contraption. To him, "table" or "book" could equally well mean "chair." His biological feeling of motion will soon tell him what one has to *do* in order to "use" this peculiar sitting apparatus. Not until our primitive has established this practical, that is, functioning contact, will he give the contraption a name, such as "leg rest" or "buttocks support."

O. Our classical biologists are not that close to reality. Classical biology has divided and subdivided the realm of the living according to external statistical characteristics and clothed it with a host of difficult words. With that, the primitive sense for *function* and the *origin of function* was so thoroughly lost that the natural functional intelligence underwent complete atrophy. When a biologist sees an energy vesicle which is spherical and takes blue Gram stain he believes to have it satisfactorily explained when he names it "staphylococcus." With that, the avenue of approach to the question, "Where does it come from, what becomes of it, how does it function," is thoroughly blocked.

E. Yes. And since every one of the infinite number of diverse manifestations has its own word, the result is a fantastic confusion.

O. Neurology actually believes to this very day that it has "explained" a motion when it designates the nerve fibres in which the excitation runs. Among the hundreds of thousands of anatomical names referring to the animal organs there is not one referring to the orgastic contraction. For all the naming of the various reflexes one overlooked the simple and basic biological functional movements. If any animal were to move according to the description of its body in a mechanistic anatomy, it would be unable to move a limb.

E. I once saw a mental patient in a rigid attitude of defense and made a remark about it to the psychiatrist. He said, "This is the well-known opisthotonus"; the *expression* of the movement, that is, its function, he did not see.

O. It is a pleasure to hear a physicist speak in strictly functional terms. Has not the electronic theory realized the desired unification of the scientific world picture to some extent, after all? Is not the electronic theory of today in harmony with the good old atomic theory of Democritos? To judge from the newspapers and professional publications, everything seems to be pretty well settled.

E. As a professional physicist, I should agree with that; as a living organism, I cannot. To begin with, nobody has as yet seen any electrons. Their existence was *assumed* as a hypothetical working basis. They were assumed in an attempt to comprehend the *common denominator*. Unfortunately, this common denominator soon fell apart into neutrons, protons, electrons, positrons, etc., which are unrelated; one does not know their common denominator. Similarly, the atoms remained invisible.

O. Like the genes of the heredity people.

E. Exactly. Nevertheless, the misbelief in the unchangeability of the chemical elements has been dissipated by the discovery of radium by Madame Curie. But now the substances are built of electrons, positrons, etc. The question of the common denominator has only been shifted

and has become more complicated. In addition, there is magnetism, heat, mechanical energy, etc., the common basis of which is unknown. Since the times of Kepler and Newton one has known the laws of gravitation, but one knows nothing about its nature. The comprehension of the common denominator of the various forms of energy seems farther removed than ever.

O. I don't know enough of practical physics and chemistry to form an opinion here. In biopsychiatry, the mechanistic splitting up of natural science is disturbing. Physics and chemistry have thus far not contributed anything fundamental to the understanding of the vital apparatus, either theoretically or practically. The total functioning of the organism has remained a riddle.

E. People say that, with your orgone physics, you transgress your competence as a psychiatrist. If, as you contend, there is a universal cosmic energy which can be measured and made visible, the physicists should have discovered it long since. You say yourself that you do not know much of practical physics and chemistry, and thus confirm this objection.

O. Let's clarify the question of competence, first of all. It is a matter of the point of view from which competence is judged. I have often asked myself whether I was not going beyond my competence in trying to comprehend orgonotic manifestations in non-living nature. Two considerations contradicted my doubts:

First, it is a fact, one that has been stated by many eminent researchers, that thus far mechanistic natural science has contributed nothing fundamental to an understanding of the simplest life manifestations such as pulsation. Classical biology, tied as it is to the apron strings of inorganic chemistry and physics, deriving its scientific principles from the realm of non-living nature, has also failed. If one judges competence not from pretensions but from *achievements*, then there can be no doubt that the mechanistic natural sciences have not proved their competence in the realm of the living. This is clearly shown in the sad state of affairs which prevails with regard to medicine and the vital apparatus. People with cancer die a living death of putrefaction. No pathologist, chemist or medical man notices this simple fact. That is, in the question of competence of physics and chemistry with regard to living functioning, the facts decide against them.

Second, *the discovery of the specific biological energy, the orgone, resulted not from a transgression of basic biopsychiatric questions but, on the contrary, from their consistent study.* Quite logically, the discovery of an unconscious psychic life postulated the existence of a "psychic energy." Equally logically, this postulated "psychic energy" had to be thought of as rooted in the biological apparatus. Sex-economy occupied itself for a decade and a half with the vast field of psychic *emotions* before it made an important biophysical discovery: *The intensity of the sensations of pleasure, of anxiety and of rage, that is, of the three basic emotions of any animal organism, was shown, at the oscillograph, to be functionally identical with the quantity of the biological excitations in the vital apparatus.* This was a deep breach into the obscure mind-body problem. The emotional sensation is not a "result" of the biological excitation, as the mechanists had assumed for thousands of years; nor is it the "cause" of the biological excitation, as the spiritualists had always believed. It is not independent of the excitation, as the dualists believe, nor the "other aspect" of the excitation as the monists contend. The experiment shows that *excitation and sensation are one and the same process in the biological apparatus, for the intensity of a sensation corresponds to the quantity of the excitation, and vice versa.* At the same time, however, a sensation, say, a visual

impression, can produce an excitation, and, conversely, an excitation, say, the touch of a hand, a sensation. Adrenalin in the blood produces anxiety, and anxiety results in increased adrenalin secretion into the blood.

E. You call the relationship of sensation and excitation "functionally identical and antithetical." It is difficult to conceive of a simultaneous identity and antithesis.

O. This is due to the armored human structure which is incapable of thinking *functionally*, that is, in keeping with reality.

E. You will arouse violent objections if you contend that people, as a result of their biopsychic structure, perceive the natural processes in the wrong manner. If you were right, the two prevailing systems of thought, mechanism and metaphysics, would have to be thought of as resulting from the character structure of man during an epoch of some thousands of years. That is hard to swallow.

O. Not any harder than what man had to do when he had to give up his misbelief of two thousand years' standing that the earth was the center of the universe. Then, the teaching of a divine, that is, supernatural, creation of man created the misbelief that man was the center of the world and, with that, the earth was the center of the universe. Similarly, the misbelief that man thinks, independently of his character structure, "in itself logically and correctly," creates the erroneous beliefs of his natural philosophy. Ever since the beginning of written history, human structure has become rigid as a result of authoritarian civilization; for this reason it no longer follows, as does that of the animal, purely biosocial laws. It is not difficult to understand that a biologically rigid organism experiences its own body, and with that its sensations and perceptions, in a different way than a biologically non-rigid organism, say that of a snake.

E. What you mean is this, then: As natural philosophy has always known, sensation is the only portal through which we gain access to the environment and our own organization. If, now, the sensations of the organism are not unitary, if they are blocked or split apart, this state of affairs must be reflected in the perception and the intellectual comprehension of the natural processes. In that case an organism which does not experience its vegetative currents directly and in a unified manner but which, nevertheless, is under their influence, would have to assume mystical, supernatural forces. An organism, on the other hand, which experiences itself as angular and mechanical could produce no other than a mechanistic world picture.

O. Precisely. Functional thinking, on the other hand, corresponds to the natural unitary functioning of the organism. This fact is clearly established by painstaking character-analytic investigations. In schizophrenia, for example, the emotions are perceived as influences coming from without, because the perception of the vegetative currents is blocked from the excitation. The splitting off of excitation and sensation is a basic symptom of this disease and gives it its name. The compulsive character, with his mechanical, angular, unyielding compulsive thoughts, with his dividing into mechanical subdivisions everything he experiences, is the prototype of mechanistic thinking. In reality, mechanical rigidity and mystical experience usually go hand in hand. This is so because the mechanistic splitting up of self-perceptions leaves a void as far as experiencing life is concerned; the mystical experience then makes up—in a pathological manner, of course—for what the rigid, mechanistic thinking does not provide.

E. Can you graphically depict your schema of biopsychic functioning?

O. This is what it looks like:

FIG. 1. Schema of biopsychic functioning.

As you see, this schema comprises the unity as well as the antithesis of the biopsychic apparatus. What functions antithetically at the surface is identical in the depth. This schema has proven a safe guide in the most difficult observations and formulations of natural science.

E. I would like to test it on a simple example from the realm of the non-living. It does apply to magnetism: the north pole and the south pole of a magnet are antithetical. In the function of magnetic attraction they are identical. Now, if we try to describe magnetism by way of the methods refuted by you, we would have to say, "The quality of the north pole determines the quality of the south pole." This is obvious nonsense, as is the converse. Or, "The quality of the north pole and that of the south pole are one and the same thing." This is incorrect, for north pole and north pole repulse each other, while north pole and south pole attract each other. "North pole and south pole function in a parallel manner" would be equally wrong.

O. Try it with an example from chemistry.

E. Sodium ions and chlorine ions are functionally antithetical, but they do not "cause" or "determine" each other. Sodium goes to the cathode, chlorine to the anode; they have a positive and negative charge, respectively. But they attract each other chemically and form the neutral compound NaCl. In this, the two antithetical functions are united, forming a new and different functional unit, NaCl. Your scheme applies here as well as for any other chemical compound.

O. Test it on more general natural processes.

E. Your formula applies to the whole realm of nature: Living matter is sharply distinguished from non-living matter and often antithetical to it. At the same time it has basic factors in common with non-living nature, such as the basic chemical and physical processes.

O. The simultaneous identity and antithesis of living and non-living matter is most easily demonstrated in the orgone-biophysical formula of living functioning. It is the basic formula of biological pulsation: MECHANICAL TENSION → ENERGY CHARGE → ENERGY DISCHARGE → MECHANICAL RELAXATION. It applies to the pulsation of the heart as well as the motion of the worm or the contraction of the vorticella.

E. I see: Tension and relaxation, charge and discharge are also found in non-living nature. To that extent, living nature and non-living nature are functionally identical. The antithesis consists in the fact that these physical functions occur in living nature in a *four-beat combination* which is specific of life and does not occur in non-living nature. That's amazing.

O. Now try to apply the mechanistic or the vitalistic method of thought to this.

E. . . . "The non-living determines the living." Correct. But, on the other hand, life also turns again into the non-living. This fact is left out of consideration in the concept of a one-sided determination of the living from the non-living . . . Spiritualism postulates the dependence of the non-living from the living. Correct, for living matter turns into non-living matter. But here the opposite direction of the process is left out. . . What about the dualistic theory? "Life and non-life are two different, independent, parallel natural processes." This is obviously erro-

neous . . . Now as to monism: "Life is identical with non-life." This, too, is obviously one-sided and therefore erroneous. Your formula, better than anything else, reflects reality: Living matter is identical with non-living matter and at the same time antithetical.

O. Our formula of living functioning solves the age-old feud between the mechanists and the vitalists. Living matter follows, indeed, the same natural laws as non-living matter, as is assumed by the mechanists and materialists. But at the same time there is, as the vitalists contend, a fundamental difference between living and non-living matter. The functional identity between life and non-life consists in the fact that it is *one and the same energy which governs both realms.* Living matter is different in that it functions according to the four-beat of TENSION → CHARGE → DISCHARGE → RELAXATION, which four-beat does not exist in non-living nature.

E. You are supposed to have said somewhere that any concept, including the metaphysical one, has some basis in reality somehow. Does that mean that the diverse theories concerning nature are concerned, in each case, with different aspects or functions of the same natural process?

O. I once set out to combine into one whole the diverse and contradictory methods of thought in our basic schema of functioning.

E. But that is impossible. For if the diverse methods of thinking deal, in each case, only with individual functions, they cannot possibly be united in a schema of thought which proves these diverse methods to be one-sided or incorrect.

O. Yet, it *is* possible. One must even assume that the organisms which observed and described the natural processes—in spite of onesidedness and incorrectness—nevertheless hit upon parts of the real facts which are contained in our functional schema.

E. Now, for example the spiritualistic concept that the spirit creates the body can hardly be compatible with a functional concept of nature.

O. Let us divide our schema into divisions which we number:

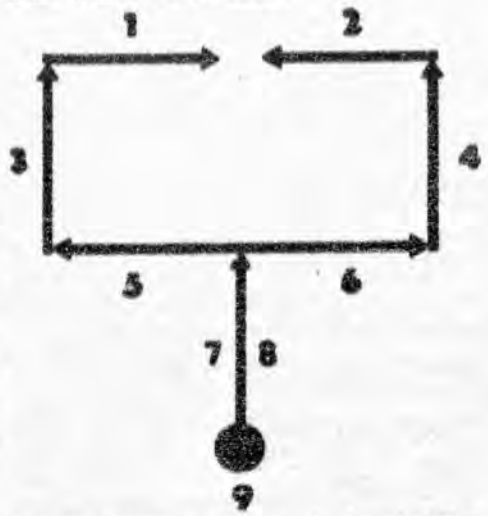


FIG. 2. Diagram of energetic functionalism comprising mechanistic, vitalistic, parallelistic, mystical-theological and monistic natural philosophies.

1 → ← 2 Mechanistic materialism
2 → ← 1 Idealism, vitalism
3 ↑↑ 4 Psychophysical parallelism, dualism
5 ← → 6 Theism, mysticism
7 ↑ 8 Monism, psychophysical identity
9 The "common denominator of nature," the cosmic energy, orgone (mystically: "God"; physically: "ether").

Now, if we consider the constituent parts of the schema separately, we find the following:

At the surface, at 1 and 2, there is an *absolute antithesis of psyche and soma.* This is the realm of the mechanists who derive psychic functioning one-sidedly from chemico-physics; it is also the realm of the vitalists who, conversely, believe that the vital energy creates and determines the soma. "The soma determines the sensation," say the mechanists; "the sensations (the entelechy) determine matter," say the vitalists. It all depends on whether your point of departure is 1 or 2.

3 and 4 run parallel, and—considered apart from the rest of the diagram—without any connection between each other. These lines correspond to the parallelistic mind-body theory, according to which somatic and psychic processes are independent of each other and run a parallel course.

5 and 6 run *apart* from each other. They correspond to that concept which contends that matter and spirit, soma and psyche, instinct and morals, nature and culture, sexuality and work, earthly and divine things are incompatible; more than that, that they are antithetical. They represent the thinking of every kind of mysticism.

At 7 and 8 there is only *one* line of direction, which can be viewed either from the left or the right side. It corresponds to the concept of monism, of psychophysical identity, according to which psychic and somatic are merely different aspects of the same thing. We must admit that the monists, in their thinking, came closer to the truth than the mechanists, vitalists, dualists and others. They have come very close to the common origin of all other functions. But they overlooked the *antitheses* which result from the splitting up of the unitary, as for instance that of nature into living and non-living matter, animals and plants, or that of the organism into autonomous organs. In overlooking the antithesis, they also overlook the mutual interdependence of the somatic and the psychic.

Our functional schema, on the other hand, takes into consideration the many autonomous functions of a *functional unit.* According to this concept, the various functions derive from a common source (9); in a certain realm, different functions are identical (7, 8); in a different realm, they are divergent (5, 6); or they run parallel, independent of each other (3, 4); or, finally, they are convergent, that is, attract or influence each other on the principle of antithesis (1, 2).

To illustrate in concrete terms: The animal organism derives from a single unitary cell which is equipped with the function of orgonotic expansion and contraction (9). From this unitary cell develops, on the basis of the function of tension and charge, the somatic as well as the psychic function of what is going to be the complicated total organism, in a *unitary* branch (7/8) which manifests as yet no differentiation into independent psychic and somatic functions.

Then we see a differentiation taking place: the somatic functions develop by themselves, forming, in the course of embryonic development, the various independent organs. In this period, the emotional functions are not developed beyond the primitive stage of pleasure and unpleasure perceptions. At birth, soma and psyche already form *two branches* of a unitary apparatus (5, 6), the organ functions on the one hand and the pleasure-unpleasure functions on the other. The bio-energetic branch which they have in common (7/8) continues to exist.

From this point on, the two developments run independently of each other, i.e., "parallel" (3, 4), at the same time influencing each other. The various body organs have been formed and continue to grow. Independently of this, the pleasure-unpleasure function branches off into the three basic emotions of pleasure, anxiety and rage, and the various functions of perception. The development and differentiation of the function of perception is autonomous, independent of the growth of the organs. Nevertheless, both series of development are provided with biological energy from the *common* branch (9 and 7/8) in the form of the autonomic nervous system. For the growth of the organs as well as the development of the emotions depends on the total function of the autonomic life apparatus.

During the first few months of postnatal life, one can observe how the organ functions (movements of eyes, arms, legs; grasping, sitting up, etc.) become co-ordinated with each other into a totality, while, on the other hand, the pleasure, anxiety and rage reactions also become more detailed, more co-ordinated and more unified. Then follows, step by step, the contact between organ *movement* and organ *perception*, the reaction of the organs to perceptions and the reaction of perception to organ movements. With the co-ordination of individual, as yet purposeless movements into purposeful total body movement; with the co-ordination of individual sensations into the perception of the total body; and with the co-ordination of total body impulse with body perception, that gradually develops which we call *consciousness*. The innumerable individual functions continue to operate independently, but at the same time they form a unitary whole and influence each other synergistically and antagonistically (1, 2). With the function, say, of walking, the "goal" of locomotion develops, e.g., that of reaching a table. *The function determines the goal*, not—as the vitalists believe—the goal the function. But the function also determines the chemico-physical processes, and not vice versa as the mechanists believe. Such is the functionalism in biological reality which guides our thinking. The more exact our observations, the more fluid and differentiating but at the same time more comprehensive and unitary are our deductions.

The functional nature of our thinking is shown in the fact that it recognizes antitheses and identities alongside with other functions. It is not rigid; it recognizes transitions; it follows, nevertheless, definite laws. The mechanistic splitting up of an all-embracing, unitary natural function into single functions, on the other hand, results inevitably in rigidity since it does not allow for the fact that the same process may have different functions at one and the same time.

E. What you have shown here is indeed far from being just a play with lines. Since it leaves room for differentiation, the common denominator and antithesis at one and the same time, it really is a true reflection of reality. Man and woman have a common origin and common interests. They have a sexually antithetical anatomy, their interests may be different and yet run parallel, and in spite of any antithesis they can attract each other and melt into each other. How did you come upon this methodological schema of thought?

O. Biophysical thinking, comparing and differentiating is guided by the functions of the organism. The organism presents a marvelous picture of unity and differentiation. It forms a functional unity and totality. All its organs derive from one tiny undifferentiated germ cell. What is unitary and undifferentiated splits up into diverse organs with a different function and construction. The action of the heart has in itself nothing to do with the function of hearing, the contraction of the biceps nothing with gastric secretion. Nevertheless, in spite of all the autonomy of the various organs, the organism presents the perfect picture of harmonious unity, order and co-operation, in short, that of biological self-regulation. If, now, you arrange the various functions of the organism in a schema, beginning from the common denominator and from the simple functions, progressing to the complicated and antithetical, you arrive at our schema of functional thinking.

E. I begin to see why you should have such difficulties in coming to an understanding with other sciences. This methodology of thought is new. It is manysided. The usual methods of thinking are one-sided. In your methodology, the functions show fluid transitions and yet are shown to follow definite laws. The customary thinking establishes more or less rigid limits, allowing of no such transitions.

O. You are right. Our functional method had to be developed in the study of the psychic and somatic functions before the orgone could be discovered. To come back to the question of competence: Does it not seem logical now that the discovery of the biological energy took place not in the realm of chemistry or physics, but in the realm of biopsychiatry? The guiding principle was not the functioning of the Diesel engine, but the *pulsation* of the heart, of a vacuole or a protozoon; not the chemical compound, but sexual attraction; not the Xray, but emotional excitation; not the flight of an airplane, but the flight of a bird or the motions of a fish, not the motion of an engine piston, but orgastic contraction or the contraction of growth in the embryo. In brief, it was *the functional manifestations of living matter, and not the mechanical ones of non-living matter, which brought sex-economy on the tracks leading to the orgone energy.* The manifestations of life revealed the energy which governs them for the simple reason that sex-economic research did not borrow anything from the realm of the non-living; rather, it learned to deduce the nature of living movement, and, with that, the nature of the biological energy, from direct observation. In the course of the past decade, many physicists tried to follow. Many of them failed, for the simple reason that they were incapable of giving themselves over to the process of their perceptions and sensations and incapable of simply relinquishing an orientation by non-living processes.

E. It would be peculiar if a New Yorker, coming to Stockholm, were to try to orient himself by a map of New York.

O. I wonder whether you will be as easily convinced if we enter, in a practical way, the field of perception and its interpretation. I am afraid that there we will find ourselves taken not from one city to another city, but to a dense jungle which has no resemblance to a place of habitation at all, where streets and houses still have to be built.

E. It is easier to follow where it is a matter of theoretical principle than where it is a matter of practical work. The joy in hearing, over the radio, of a military victory, has little in common with the emotions experienced in the actual winning of the victory. Things are easier for the spectator than the actor.

O. As a hardworking natural scientist, one experiences idle praise as almost as painful as the carping criticism of the uninitiated passer-by. The functional method of research requires a manysided knowledge of basic facts and the ability to relate isolated facts with each other. This is why it is so difficult to come to an understanding with the specialists who think and work mechanistically. In addition, functional research presupposes a knowledge and mastery of one's own character structure and that of others. This is so because every perception and sensation is tinged by the character structure. Orgasm research required this self-control to a particularly high degree, since it has connections with all fundamental branches of research in natural science. Orgasm research grew out of psychiatric work, took roots in sexual biology, pushed on to the emotions and with that to the biophysiology of excitation. With that, however, at first without having an inkling of it, it entered the realm of the cosmic energy.

E. To one not intimately acquainted with these problems it would seem peculiar that a new branch of physics should have developed from sexological research. I think you should no longer speak of sex-economy and orgasm theory, but of orgone physics and orgone biophysics. This would make your theory to be much more readily accepted.

O. And would make a new field of

knowledge to be soon obliterated. I well know people's reactions to the terms of sex-economy and orgasm. They evoke pornographic ideas. For that, however, not sex-economy is to be blamed, but the character structure of the people who react in this manner. These reactions are painful and create ridiculous as well as dangerous situations. But should one give in to such manifestations of the emotional plague, this universal disease which finds itself confronted for the first time by a deliberate medical opponent, namely, sex-economy? No, we must continue to adhere to the terms and concepts of sex-economy for more than historical reasons. Without sex-economy and orgasm research, the orgone would not have been discovered. However, orgasm research has more than a historical significance for orgone research. People and concepts come and go. They are like accidental passengers on an express train; the passengers stay on for a short stretch and disappear again; the express train, however, continues across the continent. Compare the function of a human prejudice with the function of the living! The human prejudice which impedes orgasm research is at most 4000 years old. The orgasm function, however, is timeless. Besides respiration, it is the basic function of the living, as expressed in the orgastic longing—conscious or unconscious—of man and animals. It is not due to this natural process that the animal, man, deteriorated pornographically. Besides, the pornographic prejudice is not being cultivated by the human species but by some relatively few miscarried individuals; by these, it is true, it is done, unfortunately, with great and devastating success, for there is as yet no penal law against the defamation of nature by individuals suffering from the emotional plague. The most immediate practical function of orgasm research is precisely that of doing away with pornography. Beyond that, it will always remain the core of orgone research. I did not make it that way; it is so whether we want it or not.

E. You are right. There is no researcher or artist of any account whose work did not in one way or another grow out of the sexual process.

In your presentation of the function of the orgasm you speak of bio-electricity. The orgasm makes the living being part of the general process of nature. Are you still of the opinion that the animal organism is part of the general *electrical* process of nature?

O. Before the orgone energy was discovered and made an object of study, there was no other way than to assume electrical energy processes at the basis of the orgasm function. This being so, the interpretation of the processes ran, again and again, into unsolvable contradictions. For example, emotional excitation was expressed in potential differences of millivolts. This extremely small magnitude of the electrical reaction did not fit the gigantic forces at work in an organism. It is impossible to define an organism, with its unitary function, in terms of bipolarity, that is, in terms of positive and negative electricity. Nor is it possible to equate the polarity of the sexes with electrical polarity, to assume, for example, the man to be positively charged and the woman negatively. Besides, the slow, wave-like forms of motion of living tissues are at variance with the rapid, angular motions of electricity. In other words, there were, even before the discovery of the orgone, considerable difficulties in applying electrical concepts in the realm of the living. The gradual exploration of the orgone settled this question by demonstrating beyond any doubt the *non*-electrical nature of the orgone. True, electrical stimuli result in sensations, but these sensations are alien to the organism, they have a disturbing effect and are at variance with organic sensations. Incidentally, physiology has not yet succeeded in reducing the specific biological reactions to electrical processes. It did not get any farther than the application of electrical stimuli and the study of the action currents. But between stimulus and action current there is a third link, the specific biological reaction. This, however, is independent of the stimulus as well as the action current. It functions without stimulus also; in addition, the kind of the reaction is specific and has nothing to do with the electrical stimulus. The same electrical stimulus produces a different reaction in a skeletal muscle, a heart muscle, or a smooth muscle. True, the electrical stimulus can bring about a biological reaction, a contraction; but the energy of the contraction is something different from the energy of the stimulus.

E. Do you take the basis of the biological reaction to be a "spirit," an "entelechy"? It seems to me that this basic question should be dealt with first of all. Not only the theists and mysticists, but prominent natural scientists assumed a general "animism" of nature, including non-living nature. This concept of nature, beginning with the "soul atoms" of Democritus, persisted over more than 2000 years in the diverse forms of natural-scientific idealism; we find it in the "crystal soul" of Haeckel, the "categorical imperative" of Kant, etc. Correctly thinking materialists always postulated a "perceiving matter"; this seems to be the greatest riddle of all research in natural science, if one excludes the metaphysical, absolute universal spirit. Very likely, the perceiving plasma of the animal, man, has misinterpreted the cosmic energy in terms of an absolute universal spirit. Unfortunately, man made out this universal spirit as unknowable and invested it with banal human characteristics, such as a beard.—Where do you put the boundary line between life and non-life?

O. It is not long since a "soul" and "perception" was ascribed only to man as distinguished from the other animals. From the biophysical point of view, no line of demarcation can be found in the realm of the living at which perception is added to pulsation. If we draw the consequences from our bio-electrical experiments, according to which the quantity of a biological excitation is identical with the intensity of the perception of pleasure or unpleasure, then *biological excitation and psychic perception are functionally identical.* That is, *perception is present with the very first plasmatic expansion and contraction.* On the other hand, there is no sufficient reason for the assumption that non-contractile, that is, non-living matter, perceives. The assumption of a general "spirit" of nature, including non-living nature, is not a sound one, then. At the present state of our knowledge of perceptions and general biophysics we do better to separate the living from the non-living; the living being that which is characterized by *pulsation* (alternating expansion and contraction) and *perception,* the non-living that which is rigid and without perception. *Where there is no pulsation, there also is no perception.*

E. If the orgone energy functions in both realms of nature, and if the orgone is connected with the characteristics of life, then I see no way of excluding perception in the realm of the non-living.

O. There are some experiments which show that pulsation, that is, alternating expansion and contraction, is an immanent basic function of the orgone energy. The orgone shows a pulsatory function in rigid substances also. This finding supports your argument. But mysticism would immediately make capital of such a gap in natural science and contend that natural science had confirmed the existence of the universal spirit. Living matter differs from non-living matter in that it is capable of *participating* in the orgonotic pulsation; non-living matter,

due to its rigidity, is incapable of participating in the orgonotic pulsation.

E. In other words, we can speak of living matter only if the cosmic *orgone energy functions in matter capable of contraction, if the orgonotic pulsation produces an actual pulsation in it.*

O. Precisely. It is a matter of the *pulsatory changes in form* which occurs in matter. It is these changes of form which determine the fundamental biological functions, such as growth, division, procreation, metabolism, pleasure and anxiety. This one does not really comprehend until one has first observed the pulsation in rigid matter, that is, matter *incapable* of change of form. Thus one convinces oneself that there are *two kinds of pulsation*, energy pulsation and material pulsation. *Material pulsation and energy pulsation must coincide, must be synchronous, in order to produce life processes.*

E. Did you succeed in observing the transition of matter from a rigid state to a pulsatory state directly?

O. The study of this transition is the most important aspect of microscopic bion research. The becoming plasmatic of previously non-plasmatic matter, in other words, the appearance of the capacity of pulsation in previously rigid matter, can be observed directly.

E. You mean to say you observed movements of contraction and expansion in previously rigid substances?

O. Yes. But such observation is not possible at a magnification of less than 3000x. This direct observation shows beyond any doubt that what causes the movement is *inner impulses* and not external mechanical impulses which the mechanist ascribes to the molecules and calls "Brownian movement."

E. One should think it's obvious that Brownian movement can result only in a movement from place to place and that it cannot explain *inner* motility.

O. This has already been admitted by some biologists.

E. Movement without energy is inconceivable. Since we must exclude the presence of external impulses, the inner motility can be ascribed only to an energy which develops in and from the matter itself.

O. It cannot possibly be otherwise.

E. How do you bring about the transition from rigidity to inner motility?

O. By making matter swell. This can be done simply by putting it in water. Depending on its hardness and density, it will take more or less time until the first manifestations of inner motility appear. In order to shorten the process, we add substances which promote the process of swelling, such as potassium chloride, and heat the solutions in the autoclave to 120°C. In doing so, we reproduce a process which continually goes on in nature. After a long spring rain, for example, one finds vividly pulsating bions in the soil. Very hard or rigid substances such as rock or coal have to be "smashed" by heating them to incandescence before being exposed to the process of swelling.

E. How does the bion differ from its substance of origin?

O. First of all, structurally. For example, a coal particle, a rock particle or a particle of iron filing shows a smooth or striated structure. After having been made to swell, however, the same substances show, particularly in the dark-field, a vesicular structure. The vesicles detach themselves. If viewed at a magnification of 3-5000x, with apochromatic lenses, their content appears blue or blue-green. The substances of origin, however, show their own color: coal appears black, iron blackish brown, etc. Every substance which has been made to swell and every living substance shows these two characteristics: *bionous, vesicular structure* and *blue or blue-green* content.

E. At what stage do the pulsatory movements occur?

O. When the membrane of the bion has become thin enough to yield to the impulse to expansion and contraction from the inside.

E. I would like to limit myself to the physical manifestations and suggest that we postpone discussion of the biophysical manifestations until we have understood the orgone functions in the realm of the *non*-living.

O. Fine.

E. Do you find that the particles exert any influence *at a distance*, and are there any differences in this respect between the bions and the substances of origin?

O. The non-living substances of origin show no inner motility, the bionous substances do. This indicates the mobilization of attractive and repulsive forces in the process of swelling. The rigid substances of origin have no influence on bacteria which are placed in their proximity. The heaps of bionous matter, however, attract and paralyze them. This effect is the more marked the more mobile and the more strongly radiating the bions are.

E. You say "more strongly radiating." How do you determine this?

O. Bionous matter refracts light more strongly than does non-bionous matter. Microscopically and photographically, it shows a strongly refracting "margin" around the membrane. This radiating margin appears with the bionous disintegration of matter and disappears when the bion dies, that is, becomes immobile or degenerates into T-bacilli. T-bacilli, or, to put it differently, particles with a weak orgone charge, show no radiating margin; blood platelets do not show it. The radiating margin, then, is certainly not a phenomenon of refraction.

E. You assume a connection between orgone and light. What have you found out about that experimentally?

O. Nothing really, up to now. The connection is still obscure. We have experimented with photographic plates for the past five years, without reaching a satisfactory conclusion.

E. Are photographic plates influenced by the orgone?

O. We have incontrovertible proof that the orgone affects the photographic emulsion. However, the results obtained in different experiments are so contradictory and so unusual from the standpoint of customary radiation photography that they are as yet inconclusive. For this reason, we are not yet publishing the results obtained thus far.

E. After all, in a research field as new as yours, nobody will ask to see everything settled at once. Does the orgone influence the photographic plate like light or like another kind of electromagnetic energy? Does it *blacken* the plate?

O. According to observations to date, the atmospheric orgone consists of *three* different forms of energy. I shall not tell you about them yet, because I would like you to see them for yourself. Since the orgone penetrates everything and for that reason it has not been possible to delimit it, it was also not possible to separate the three different forms from each other. If one exposes photographic plates in the dark to concentrated orgone, one obtains doubtless results which correspond to a light influence. If, however, one exposes plates to concentrated orgone *and* light, simultaneously or successively, one finds that those parts of the emulsion which were influenced by the orgone no longer react to the light influence. It seems, then, that the orgone acts at one and the same time like light *and antithetically* to it: On the one hand, it blackens photographic plates, and on the other hand it prevents or reduces the blackening by light.

E. That sounds peculiar. The prevention or reduction of the light effect by some energy is something basically new.

But now I would like to see the orgone energy.

O. That will not be difficult. We sit down in this completely dark orgone accumulator. It consists of a double layer of organic and metallic material. From the outside to the inside, it consists of a layer of celotex, then a layer of sheet iron, then again a layer of celotex and another layer of sheet iron. We shall have to adapt our eyes to the darkness for about half an hour. Then, will you describe your observations?

E. All right. I am very curious and believe in direct observation. In physics, unfortunately, we cannot directly observe the flight of energy particles; all we can do is to photograph it. But that is not the same thing. We are forced to form hypothetical concepts concerning the motion of the electrons, without being able to observe them. We can only deduce their motion but cannot see it. The motion of the energy particles is too rapid for our eye and is in itself not perceptible except by way of fluorescent substances or the photographic plate.

O. In observing the orgone, we have the great advantage that the motion of the particles is *very slow* compared with the speed of electromagnetic energy . . . Keep watching a definite spot on the metal wall of the accumulator. You will have to wait until you really can see the phenomena.

E. I find that the room is not absolutely black, but as if filled with a dim diffuse light. It is of a *bluish-gray* color. It also seems that there are small bluish dots flying by. But I can't be sure, because when I close my eyes, they continue to be there.

O. Since the orgone is present everywhere, you have it in your eyes just as you have it outside, at the wall of the accumulator. This is one of the difficulties inherent in these observations. The orgone also irritates the optic nerve and produces after-images.

E. Now it becomes more distinct. I see small blue sparks fly toward me and past me. They seem to come out of the walls, at rhythmical intervals which have nothing to do with my pulse rate . . . As the dots move toward me, they seem slowly to contract and expand. When flying by sidewise, they take a trajectory similar to a parabola. This trajectory is interrupted by loop-like forms; it is as if the dots, at certain points of the trajectory, would begin to fly in the opposite direction, thus forming a loop.

O. Can you tell whether the distances between the loops are uneven or about even?

E. They seem to be about even.

O. We shall draw the form of the trajectory sometime and discuss it. For the time being, just get acquainted with it . . . In the corner of this large orgone accumulator is a small one consisting of three layers each of organic and metallic material and measuring 1 cubic foot. It contains a small frosted bulb such as are used in the development of highly sensitive photographic films. In the front wall there is an opening measuring 4 square inches, containing a cellulose disc with a dull surface on the inside. In its stead, one also could use a fluorescent screen such as is used in Xray fluoroscopy. I now turn on the green bulb.

E. . . . I see some sort of movement at the disc; as if vapors moved over it. It is like a vivid flickering . . . Why, this is amazing! You have turned on a dark green electrical bulb which gives a steady dim light. But what I see, in addition to the flickering, is not green, but *blue-violet* light!

O. This is the specific color of the orgone. Can you distinguish details?

E. . . . My eyes are somewhat blinded.

O. This cannot be due to the green light, for the eyes rest in the dark and are not irritated by dim green light.

E. It is as if the opening became alternatingly lighter and darker. At times the impression of light seems to disappear altogether. Other times it looks as if luminous vapors came through the opening as if in individual impulses.

O. Here is a magnifying glass with a magnification of 5x. Focus it on the disc.

E. . . . I see yellowish-white rays which move very rapidly in all directions. It looks like miniature fireworks.

O. In other words, you have now seen the three different energy forms of the orgone: blue-gray vapors, blue-violet dots which float slowly and form loops at regular intervals, and, finally, rapid, straight, yellowish rays.

E. There can be no doubt about it. It is remarkable that you should not yet have succeeded in photographing this intensive energy in an unmistakable manner. Doubtless, it has some connection with light, for the light dots were far less distinct in the dark than they are now against the background of the steady, dim green light. It is as if the dim light produced a stronger radiation in the particles. A most peculiar thing!

O. Instead of the green light, I shall now turn on a dim *red* bulb such as is used in dark rooms.

E. . . . There are, against the dim red light at the disc, violet patches, definitely. You did not turn on a violet bulb, did you?

O. No, but red plus blue gives violet. This goes only to show again that there is, in the atmosphere, a blue energy.

E. The longer I look, the more distinct become the trajectories. There can be no doubt: the trajectory continues, in a rhythmical manner, to turn back on itself, and the little dots become alternatingly bigger and smaller. What do you think about it? What does it have to do with the nature of light?

O. Let's turn on the light and discuss this question another time.

E. The facts can no longer be doubted, though they are very difficult to comprehend. Radiating energy points which move very slowly and seem to float! . . . My eyes hurt.

O. We shall get some fresh air. The air in the orgone accumulator is heavy. And we have been sitting in it for an hour and a half.

E. I should like to think this experience over. Could we continue our discussion in a couple of days?

O. I shall look forward to it.

II. THE ORGONOTIC EXCITATION OF INSULATORS. QUESTIONABLE POINTS IN THE CONCEPT OF STATIC ELECTRICITY.

O. You have convinced yourself of the existence of visible energy particles in the atmosphere. I termed this energy "orgone," at first in order to distinguish it, for the purposes of investigation, from all other, known phenomena of radiation. We have good reasons for the assumption that the functions of this energy cannot be subsumed under the concept of "electricity." My observations force me to assume that what is commonly called electricity is only a special function of the orgone energy.

E. That is a very radical conclusion. One cannot simply introduce a new concept of energy and thus reduce to insignificance an old concept worked out by thousands of researchers. But I shall listen to your arguments.

O. Before giving them, let us find out whether there is, in the world of physics, any kind of consensus of opinion concerning the basic principles of electrics. Is there an awareness of fundamental gaps in the understanding of electromagnetism?

E. Indeed there is. There are plenty of contradictions. Quite a number of promi-

nent physicists doubt the correctness of the prevalent concepts of so-called "static electricity."

O. How would you briefly formulate these doubts?

E. Modern physics in general has progressed to functional formulations of energy. The concepts of "matter" and "energy" are no longer rigid; they no longer denote sharply delineated fields but, rather, a functional condition, a condition which allows of transition. No longer is "energy" thought of as attached to "matter"; rather, matter is considered extremely slowed down energy which has become rigid, while energy is considered matter dissolved and extremely speeded up. Compared with such functional concepts in modern physics, the concept of the two "electrical fluids" which supposedly explain the phenomena of the static electroscope is unsatisfactory.

O. The findings of orgone biophysics absolutely fit the *functional* concept of the relationship between matter and energy. On the other hand, they are at variance with the concept of two separate electrical fluids, positive and negative electricity. This old theory is a reflection of mechanistic thinking which splits things up. This thinking not only made an absolute distinction between "matter" and "energy"; it even split up the electrical energy into two independent "fluids."

E. For that, the old scientific pioneers should not be blamed. After all, this concept was in accord with a number of phenomena of friction electricity. A rubber rod, when rubbed, shows an energy which indeed has the opposite electroscopic effect from the energy shown at a rubbed glass rod. If one deflects the electroscope leaf with a rubbed rubber rod, a second rubbed rubber rod will increase the deflection, while a rubbed glass rod will decrease it. This confirms the concept of the two separate electrical fluids.

O. I have carried out the old experiments with this kind of electricity many times and can confirm them. But in doing so I have made two observations which are at variance with the theory.

E. New observations may still be understood in terms of the old theory. Only if this is absolutely impossible; only when a new concept brings more facts into a simple unit than the old theory, and does it in a better way; only then has it a right to replace the old theory. Experimental physics is rightly strict in judging new theories, if for no other reason, to avoid chaos. What are the observations which are at variance with the theory?

O. I continued the experiments with rubber electricity and glass electricity in the following manner: Instead of rubbing the glass rod on dead felt, I rubbed it on the ***hair*** of my head. The electroscope was charged with an energized rubber rod. According to your mechanistic theory of friction, there should be no difference between the dead felt and my hair: friction is friction. Consequently, the glass rod which was energized at my hair should *decrease* the opposite charge of the electroscope. In reality, it *increases* the charge; that is, it has the same sign as the rubbed rubber rod. This contradicts the assumption of a specific glass electricity. It would be senseless to assume that the glass rod becomes energized like the rubber rod if rubbed at the hair, and like a glass rod if rubbed at the felt. It is conceivable, however, that the process taking place between glass rod and hair is a different one from that taking place between glass rod and dead felt. This phenomenon is incompatible with the mechanistic concept of electrical excitation by friction. My observations of the orgone manifestations explain the contradiction. The hypothesis of the two specific electrical fluids fails us here.

E. Not yet. There is the possibility that the glass rod takes up negative electricity from the hair, while it may itself become excited, that is, react positively, at the felt which is much rougher than the hair.

O. I raised this objection myself. Another experiment answers your argument. If you were right, then the friction at the felt—independent of the sign of the excitation of the glass rod—would have to result in the same deflection of the electroscope as the identical friction at the hair.

E. Yes, if one considers the identical amount of mechanical friction to be the cause of the phenomenon. What does the experiment show?

O. I stroke the glass rod lightly over the hair of my head, just once. The electroscope leaf deflects to an angle of about 45 degrees. Now we discharge the glass rod with water. We stroke it lightly over the much rougher felt. The leaf deflects only minimally or not at all. That is, the phenomenon is not mechanically determined. *The hair not only energizes the glass rod much more easily than does the felt; it also charges it with a different energy, the same as that of the rubber rod.*

E. There must be a mistake here; that's completely incomprehensible.

O. There is no mistake. I have made this experiment hundreds of times, always with the same result. It is in accord with other observations of the orgone. The phenomenon is incomprehensible only from the point of view of the mechanistic concept of the two separate electrical fluids attached to glass and rubber, respectively.

E. What does the same experiment show when done with the rubber rod?

O. A confirmation. 1. *The excitation by the hair is in the same direction as that by the dead felt.* 2. The excitation by the hair—the manipulation being the same—is incomparably stronger than that by the felt.

E. What is your conclusion from these findings?

O. Only a preliminary one. It is: *So-called "friction electricity" has nothing to do with friction.* Further facts will confirm this assumption.

E. How does your theory explain the fact that, after all, rubber or glass have to be rubbed in order to get a deflection of the electroscope? Apparently, friction is indispensable. You draw off from the hair, that is, use friction.

O. "Drawing off" and "rubbing, using friction" is not the same thing. There are orgonotic phenomena which appear only if one draws off *gently* but not if one rubs strongly. Friction eliminates many reactions which are easily obtained by gentle stroking. More about this another time. The orgone theory answers the question of friction in the following manner: The orgone energy is present *everywhere.* The felt is permeated by it as is the soil or the atmosphere. The felt, however, being a non-living substance, does not of itself radiate energy. It only gives off what it has taken up from the environment or what is released by strong friction. The living hair, on the other hand, radiates orgone by virtue of its living functioning. It is *spontaneously* charged. For this reason, it is very easy to draw off orgone from the hair with a rubber or glass rod. The felt, on the other hand, does not live, that is, does not spontaneously give off orgone. In order to get it, one has to "rub it out" of it.

E. From this it would follow that the concept of "friction electricity" could be replaced by that of *orgonotic excitation.* "Friction electricity," then, would be no more than an uninteresting special case of orgonotic excitation which may be based on passively absorbed orgone or orgone radiated as part of living functioning.

O. That is precisely the conclusion to be drawn from these observations. It does

not become fully convincing, however, until one demonstrates the same electroscope reactions without friction and without drawing off of energy.

E. This would indeed be incontrovertible proof. But I doubt that it can be done.

O. Yes, it can: Rubber or cellulose, if rubbed on metal, shows no electroscopic reaction, regardless of how we interpret this fact. We take a cellulose disc and make sure that it shows no reaction at the electroscope. We then leave it lying for a few days on the metal wall of an orgone accumulator. Depending on the orgone tension in the accumulator, the cellulose disc will absorb orgone more or less quickly and will show a more or less strong deflection of the electroscope. In making this experiment, one must have patience and not expect the reaction too soon.

E. You should not expect the physicists to go to too much trouble with new experiments. Is there not another method of demonstrating the orgonotic excitation without friction and without stroking?

O. Yes, there is. The sun continues to radiate orgone into the atmosphere. Let us put a cellulose plate which is electroscopically indifferent into bright sunlight, possibly in the absence of wind. After about 15 to 30 minutes of exposure to the sunlight the cellulose will show a deflection of the electroscope; the magnitude of the reaction will depend on the intensity of the sun radiation and the relative humidity of the air. It is important to remember that most orgone reactions disappear and cannot be reproduced when the relative humidity is more than about 50%.

E. Thus far you have only shown that so-called "friction electricity" is a special function of the orgone energy. But you have not yet proven your original contention *that orgone is not electricity at all.* What physics calls "electricity" might be a special function of the orgone; it also might be something basically different. My belief is that orgone is nothing else but negative electricity, pure and simple.

O. This is exactly what was said by a Dutch physicist at the time of the discovery of the orgone in 1939. The orgone in the rubber or the glass rod, taken from the hair, does indeed act like negative static electricity. Since all energy must be reduced to *one* common denominator, it goes without saying that what we call "orgone" and what you call "electricity" must have some connection with each other. But, unfortunately, there are important differences. It would be much more convenient for me if I could express the characteristics of the orgone in well-known terms of electrics, if I could describe them, for example, in terms of electronics. Unfortunately, that is not possible without doing violence to the facts. *The functions of the orgone energy cannot be understood in terms of the known functions of electricity and magnetism.* This forces on the experimenter the necessity of difficult and time-consuming experiments to find out what orgonotic functions there are which do not exist in electromagnetism, which, in other words, are *specifically orgonotic;* to find out, further, what are the undoubtedly existing connections between orgone and electromagnetism; to prove, finally, that orgone and electricity are not identical. It would be so much simpler if the orgone could be subsumed under electricity. So you see that my contentions do not spring from a desire to be original.

E. I think your undertaking is hopeless. You cannot simply throw over research in electrics of hundreds of years' standing. You cannot adduce all the proofs which would be necessary to prove your contention satisfactorily.

O. It may look that way. But there are gaps in electrics which are bridged by orgone physics; there are a number of observations which are fundamental

enough to encourage the undertaking. If one *must* ascend the Mont Blanc, one cannot let oneself be intimidated by its height and the difficulties of climbing it. Patient climbing will get one a considerable distance; nobody can predict, however, whether or not one will succeed in reaching the summit.

E. Let's hear. We don't expect it to be easy.

O. There is some consolation in the following: In studying physics and in talking with physicists one meets so many erroneous contentions which continue to be made without any criticism that I have resigned myself to the possibility of adding another erroneous contention to the many. That would not matter much. But the possibility of success is too tempting to leave the attempt cowardly alone. In addition, the numerous contradictions in physics are only another incentive.

E. Well, there can be no harm in formulating a new hypothesis.

O. Electricity—to stick to the term for the time being—was discovered, and produced, by the ancient Greeks and later by Gilbert, Cabeo, Guerike, Franklin and others, in *non-metallic* substances. Those substances which produce but do not conduct "electricity" they termed "electrica"; the metallic substances, which conduct but do not produce electricity, they termed "non-electrica." The good old electrical machine was based on the principle of friction between leather and glass; the electric energy was accumulated by way of points and "Leyden jars." Franklin's famous experiments with the lightning conductor were based on this. Have you ever been struck by the fact that this original method of producing electricity has been given up and has been relegated to the museum of history?

E. Frankly, I never gave it any thought. But it is true that, since the days of Volta and Faraday, the principle of producing electricity has become an entirely different one: In industry, electrical energy is produced only by chemical elements or the motion of metal wires in magnetic fields. The generator and the battery have replaced the old electrical machine. That's all. It doesn't strike me as remarkable.

O. But it is. This has not happened by accident. The theory of friction electricity did not lead any further because it became bogged down in the concept of the two separate fluids. Technically, it was a miscarriage. *Practically,* the principle of the two electrical fluids was replaced by the more fruitful principle of the moving electromagnetic energy fields.

E. What about it? You are getting involved.

O. No, I am not. I have to call back from oblivion an extremely important fact, precisely in connection with the question whether orgone is electricity or not. My contention is that the energy with which the ancient Greeks and the moderns since Gilbert were dealing was a basically different energy from that with which the physicists are dealing since Volta and Faraday; different not only with regard to the principle of its production, but *fundamentally* different. In reality, the ancient Greeks, with the principle of friction, had discovered the *orgone.* The *electric* current was not discovered until the times of Volta, Faraday, Coulomb, Ampère, etc.; and they broke completely with that method of energy research followed by the ancient Greeks, and by the moderns to the times of Gilbert and Franklin.

E. Why, that sounds fantastic. I would not even listen any more if I did not know you as conscientious.

O. It is no more fantastic than the overlooking of the atmospheric orgone on the part of the physicists and astronomers.

E. How do you explain the fact that the atmospheric energy was so thoroughly overlooked?

O. There is a psychological or, rather, *biological* explanation which I shall put forth elsewhere. But there is also a purely technical explanation. The men who study the "cosmic rays" have been on the track of the orgone for a long time. The fact that they missed it is due to an erroneous interpretation of electroscopic reactions.

E. You don't say! Can you explain this in a simple manner?

O. Basic facts can always be presented in a simple manner. What is always complicated is the working out of new methods and, even more so, the refutation of prejudiced and erroneous concepts which shroud the simple facts. The phenomenon of overlooking the atmospheric orgone shows this particularly clearly.

E. If you had not given me an incontrovertible visual demonstration of the orgone, I would have refused to follow here.

O. It is just the point at which so many physicists refused to give me credence. One is loath to give up old, well-established concepts. That has always been so. I wonder whether man will ever reach the stage where he is willing to give up the illusion of emotional security which is provided by well-established concepts for the triumph brought by the finding of something new.

E. You overlook the factors of envy and the narrowness of everyday thinking.

O. I have learned to understand this narrowness. It is necessary for a well-ordered functioning of the social machinery and as a protection against human irrationalism. Unfortunately, it blocks the way to decisive insights and, with that, to a real mastery of the difficulties of life.

E. What are your facts? We might postpone the interpretation of the facts until later.

O. I am glad to hear you make a clear-cut distinction between the two. All too commonly, facts are being explained away by concepts without any content. When I demonstrated the bions to a biologist he brushed them off with the remark that "the Brownian movement was a well-known fact." When I asked him whether the physical Brownian movement, based on "the push of the molecules" could explain the movements of *expansion and contraction* in the bions, he became angry. Let us, to begin with, look at the new facts and try to bring them into harmony with the concepts of electrics. Will you, as an exponent of electrics, give me the current concepts of electric conduction and insulation?

E. This is simple and generally recognized: The good conductor of electricity differs from the insulator or poorly conducting material by the fact that in it the units of electricity, the electrons, are freely mobile; in the good insulator they are immobile.

O. This is in accord with the fact that the electrical energy in a wire which is insulated with rubber does not act beyond the surface of the wire. The rubber does not conduct the electricity to the surface of the wire, that is, it "insulates" it. Now I should like to show you an experiment: We insert a thin polystyrene rod between

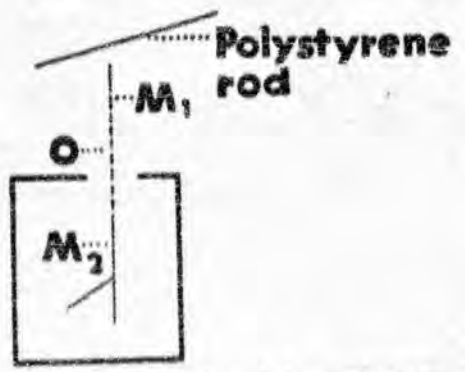


FIG. 3. Demonstration of the conductivity of organic substances for orgone.

the metal knob of this electroscope and the metal rod to which the leaf is attached. That is, we have inserted an "insulation" between the knob and the leaf.

According to your theory, no electricity should flow from the knob to the leaf. The experiment contradicts this contention: If we hold a polystyrene rod which has been charged from the hair at a distance of about 1 cm. from the knob, we get the same deflection of the electroscope as with direct metallic conduction. The only difference is that with the insulator in between the deflection occurs somewhat more *slowly*. At any rate, *the insulator did conduct "electricity."*

E. You must have chosen a poor insulator.

O. The better the insulator, the more marked the reaction. Polystyrene is known as an excellent insulator. It always gives the reaction.

E. This is amazing. I have never heard about this experiment.

O. It is amazing only from the standpoint of the concept that in the insulator the electrical units are immobile. From the standpoint of the orgone theory the phenomenon is not amazing at all. The energy which I draw off from my hair is not electricity but orgone energy which is capable of penetrating everything. *The theory of the insulators applies to electricity but not to the orgone.* Orgone is something different from electricity.

E. This one experiment would hardly suffice to prove your contention. A well-trained physicist could explain it in the framework of the concepts of electricity. For example: Have you calibrated your electroscope? Do you know the magnitude of the charge you use?

O. Yes, my electroscope is calibrated. A deflection of 90 degrees corresponds to the deflection obtained with about 1000 volts.

E. I am sorry you fell into the trap. I hope you will prove to be right. For our concept of static electricity is indeed unsatisfactory and contradictory. Our usual electrical wires have an insulation sufficient for 110 to 220 volts. If you put 1000 volts through such a wire it will go through the insulation; that is, the same thing will happen as happened in your insulator here. This fact can be understood in the framework of electrics.

O. You would hardly think that I would make such contentions without thinking of such facts and without adducing the proper proofs.

E. There can't be any such proofs.

O. They are as simple as the fact of the existence of a visible energy in the atmosphere, though hitherto it has been overlooked. Please charge the electroscope with your static energy so that the deflection represents a tension of about 1000 volts.

E. Here is the charge. What now?

O. Put a disc of cellulose, a good insulator, the size of about 6x12 inches, on the metal plate of the electroscope. Now touch the insulating disc with your finger.

E. The electroscope discharges gradually!

O. A fact which is incomprehensible from the point of view of your electrical fluids, since, according to that view, the insulator has no mobile electrical units

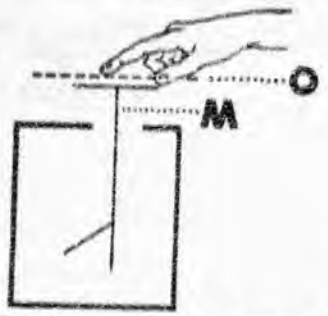


FIG. 4. Discharge of orgone-charged electroscope through an insulator.

and, therefore, cannot conduct electricity. From the standpoint of orgone physics, the phenomenon is easily understandable:

The electroscope is charged not with electricity, but with orgone. The orgone penetrates everything, conductor and non-

conductor, only at different speeds. The insulator does not conduct electricity. But it conducts orgone. This is why you can charge an electroscope with an orgonotically charged insulator just as you can discharge the electroscope through an insulator.

E. You have charged the electroscope with a charge corresponding to about 1000 volts. It must be possible to check your contention that the energy in the electroscope is not electricity. Let us connect a voltmeter with the electroscope. According to our theory, the deflection is due to a tension between the negative electricity at the leaf and the positive electricity at the casing. This must show at the voltmeter.

O. Connect the voltmeter with the electroscope in any way you wish. If the energy in the electroscope is electrical energy, then your voltmeter must react.

E. No matter how I do it, I cannot obtain any reaction at the voltmeter.

O. I know. I have checked this up many times and always obtained a negative result. The voltmeter does not react at all, in spite of the fact that the electroscope contains energy in the amount of about 1000 volts. From the point of view of electrics, this is incomprehensible. From the point of view of the orgone theory, it is simple enough: *orgone is not electricity*. The electroscope contains not an electrical but an orgonotic charge. Orgone does not influence electromagnetic measuring apparatus. This is a fact which I have been observing in amazement for years.

E. I shall assume your point of view, tentatively. According to that, there is no connection between orgone and electricity. This, I must say, sounds unlikely.

O. There is, in fact, a connection: *orgone energy disturbs electrical energy*. For many months, I connected voltmeters in diverse ways with my orgone apparatus and never saw the slightest reaction. Then, one day, a very "unscientific" method of obtaining the voltmeter reaction occurred to me. Please connect the voltmeter with this dry-cell battery.

E. Done. The voltmeter shows 4 volts.

O. Now draw orgone from your hair with the polystyrene rod and move the rod sidewise past the voltmeter pointer, at a distance of about 2-5 cm.

E. You wouldn't call this an experimental method, would you?

O. Why not? Facts are facts, whether we like them or not.

E. Agreed. Well, I get a deflection of the voltmeter pointer according to the way in which I move the rod.

O. I was just as amazed as you when I saw this for the first time. But it is really quite simple and entirely in accord with other orgone observations. *The orgone deflects magnetic needles. It disturbs electromagnetic apparatus.* The so-called electromagnetic storms in the atmosphere at the time of increased sun spot activity have nothing to do with electrical or magnetic energy. They do deflect the needles of electrical measuring apparatus, that is, they disturb them in the same manner as you did when you brought about a deflection of the voltmeter with your body orgone.

E. Why, that's fantastic!

O. Only at first glance. If one gets used to it, as I have, it becomes quite simple and clarifies many natural processes which hitherto have remained obscure.

E. Somebody told me once that control experiments had been carried out and that they had not confirmed your experiments. But here every one of your contentions is proven to be true.

O. In the early phases of my orgone-physical work, I made again and again the mistake of showing to outside physicists and biologists *individual* facts. Their reaction was always the same incomprehensible one: they saw the fact, gave some "explanation" for it and believed that with that they had understood it. I had to learn that these new findings must be presented only in their logical context, and that a clear-cut distinction has to be made between *fact* and *interpretation*. For example: When I discovered the phenomenon of lumination of fluorescent electric light tubes, I showed it to a physicist. Before demonstrating it to him, I asked him what he would expect to happen if one brought a charged polystyrene rod close to the tube. He said that *nothing* was expected to happen. When the tube, nevertheless, luminated, he was at first highly surprised, but immediately found an "explanation." It was the gas in the tube, he said. I was surprised to see that this man, a good electrophysicist, failed to realize that his "explanation" did not in the least explain *why* the tube, when approached with the charged rod of insulating material, began to luminate. The specialists have too little curiosity; they are too readily content with *words*.

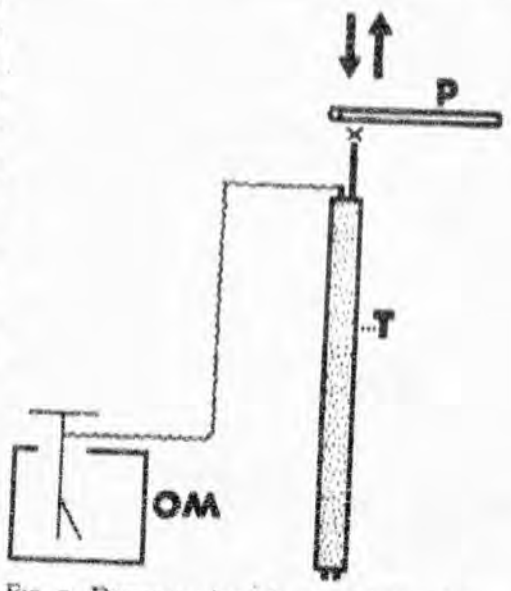


FIG. 5. Demonstration of orgonotic lumination in fluorescent tube. P = polystyrene rod; T = fluorescent tube; OM = orgonometer.

E. Your lumination experiment reminds one of the electrified atmosphere connected with the Northern lights. According to my knowledge, all astronomical radiation phenomena are explained by electrical ionization. Do the orgone experiments say anything about this?

O. You have quite correctly seen a connection here. The customary interpretations of such phenomena as the aurora borealis are altogether uncritical. In all these phenomena, we are dealing with orgone, and not with electricity.

E. Can you prove that?

O. Yes, to the extent of my experimental experience. If the Northern lights were of an electrical nature, then a voltmeter would have to react in an experimental reproduction of these phenomena. Connect one of the knobs of this fluorescent argon tube with the electroscope knob. Now move the orgone-charged polystyrene rod up and down past the tube.

E. The electroscope shows deflections of several hundred volts.

O. We shall now darken the room and adapt our eyes to the darkness. Then we bring the rod close to the knob of the electroscope.

E. The tube luminates every time the rod is *brought near* it and every time it is *removed* from it; the same happens when I bring the rod near the tube itself and remove it from it.

O. That is, the orgonotic charge makes the tube luminate, is transferred through the wire to the knob of the electroscope where it brings about a deflection, and vice versa.

E. The phenomenon would disappear if we were to ground the tube.

O. Try it.

E. The phenomenon remains the same, whether the tube is grounded or not.

O. Precisely. This fact is incompatible with the theory of positive and negative electrical charges. You remember that we have not applied a tension between two charged poles. *Our energy system is unipo-*

lar. There are, in the realm of electricity, no unipolar phenomena. Wherever they may be assumed, critical examination will result in orgone reactions, and not electrical reactions.

As we know, there are charges of several hundred volts at work in the gas tube. Now connect the knobs of the tube in any way you please with a voltmeter and repeat the experiment.

E. The phenomenon of lumination as well as the electroscope reaction continue to exist. But the voltmeter does not react, whether it is connected parallel or in series.

O. This confirms again the earlier experiments and the orgone theory: orgone and electricity are not the same.

E. According to these observations, then, "static electricity" in the customary sense is not electricity at all.

O. That is the inevitable conclusion. It is merely a matter of convention whether we are going to identify the "electricity" of the ancients with the orgone and retain the concept of electricity for the orgonotic phenomena. In this case we would have to form a new concept for that which has been known as electromagnetism since Faraday, Ampère and Volta. Or else we drop the concept of electricity of the ancients, call the respective phenomena orgonotic, and restrict the concept of electricity to those phenomena which one obtains through the movement of wires in magnetic fields.

E. This is a radical and painful operation. It would inevitably influence large fields of physics, as for instance those of the colloids and the atoms.

O. I cannot help it if I am to continue to adhere to the facts which you yourself just confirmed. It will have its advantages. One will be forced to come down out of the realm of verbiage into the realm of facts.

E. That won't be easy.

O. More than that, it will be very hard. Organized natural science becomes a means of making a living; that is one of its functions. Every kind of pioneer work is made to suffer from this as long as it cannot serve this function.

E. Do you expect these facts to be recognized by organized physics and biology?

O. I was once naive enough to do so. Only after many bitter experiences did it occur to me that the discoverer of the incandescent bulb, for example, would have been more than naive to expect the recognition of electric illumination from the manufacturers of gas lamps.

E. Who plays, in your case, the role of the gas lamp industry?

O. The pharmaceutic industry.

E. It would seem to me that the radium and Xray industry would be even more dangerous to you.

O. I know it.

E. I have plenty of food for thought. I shall be back.

III. MEASUREMENT OF THE ELECTROSCOPIC DISCHARGE IN THE ORGONE ACCUMULATOR (1940-1941).

E. I have taken plenty of time. I would not have thought that a simple electroscope could make one rack one's brain so.

O. I had the good fortune to approach the electroscope not from inorganic physics, but from the field of the biological emotions.

E. You don't mean to say that the electroscope is more closely related to the realm of the living than to that of the non-living?

O. That is precisely what I mean: The electroscope, and not the voltmeter, is the appropriate instrument for determining the nature of biological energy processes.

E. You forget about the oscillograph all too readily.

O. I'm not forgetting about it. But if I can observe phenomena in terms of hundreds of meters I shall not use measures

of fractions of millimeters; if for no other reason, to save my eyes.

E. You make great demands on my comprehension.

O. No greater ones than were made by the functions of the orgone energy on the discoverer. It took years of hard, uninterrupted work and many sleepless nights before I could come out with the contention that orgone is not electricity. And all the words coined by physics did not make things any easier.

E. After all, you don't believe that there is a complete consensus of opinion among the electrophysicists.

O. I know; but there is immediate consensus when it comes to deny social recognition to a new discovery.

E. Bitterness does not help research. Rather, prove your contention that the electroscope is more closely related to the realm of the living than to that of the non-living.

O. I will have to qualify that statement: *The energy which governs living functioning also functions in the realm of the non-living*. This merely means that the electroscope lends itself poorly to an investigation of those processes which characterize the electric industry; and that, on the other hand, it lends itself admirably to a study of the non-living as well as the living functions of the orgone.

E. In our first discussion you explained that many functions of the orgone are incompatible with the concept of the positive and negative electric fluids. But you have failed to replace this theory by another and better one. The theory of the two electrical fluids explains the deflection of the electroscope leaf occurring with the approach of a negatively charged rubber rod: The negative electricity of the rubber attracts the positive electricity of the electroscope into the disc and repulses the negative electricity into the leaf. This negative electricity in the leaf causes the leaf to deflect. If, now, you remove the rubber rod again, the deflection disappears; the positive electricity of the disc becomes free again and neutralizes the negative charge of the leaf.

O. We do not have to enter into a deep discussion of the theory of the positive and negative electrical fluids. I found that this theory cannot explain orgonotic phenomena; I also found facts which show clearly that orgone is not electricity. Friction electricity is only a special manifestation of the orgone energy and consequently something different from the electricity of Faraday.

E. What has that to do with measuring in terms of hundreds of meters and fractions of millimeters?

O. Orgone biophysics has been searching for years for the bridge between the realm of the orgone and the electricity of Faraday. The connection has remained obscure thus far, but its existence cannot be doubted. There are some peculiar facts to be considered. Mathematically speaking, 1000 volts cannot equal, say, 50 millivolt. But this is the impossible conclusion we would have to draw were we to equate orgone and electricity. The first measurements of the biological energy at the surface of the human organism were made with a sensitive electromagnetic oscillograph. The potential differences between an unexcited and an excited place of the surface of the organism were shown to be between 0 and 100 millivolt. On the other hand, one drawing off of energy from the hair of the head or from an erogenous zone easily results in an electroscope charge corresponding to about 1000 volts. The reactions of the electromagnetic measuring system, then, are in minimal fractions of those at the electroscope. Nevertheless, there is a connection between orgone and electricity, although it is still full of riddles. *The few millivolt of the oscillograph cannot be the same thing as the many hundred volts of the electroscope*. If we take into consideration the gigantic work

achieved by a living organism, it becomes obvious that the reactions of the static electroscope reflect reality much more truly than the galvanometer. The electroencephalogram reveals only unimportant partial reactions, for they are diminutive compared with the work of the brain in terms of energy.

E. This contradiction has never been explained. Your facts do indeed not admit of equating the volts of the voltmeter with those of the electroscope. I am just being struck by the fact that we can discharge the 1000 volts of the electroscope into our body without any harm, even without noticing it, while it would be highly unhealthy to touch a wire with a tension of 1000 volts. This speaks, indeed, in favor of a fundamental difference between the energy at the voltmeter and that at the electroscope. I must admit that now the idea that a rubber rod contains only negative electricity, without its positive counterpart, begins to strike me as peculiar.

O. You are getting entangled in that jungle of theories into which every orgone biophysicist inevitably gets in trying to differentiate the orgone from electricity. Physics has defined the unit of the static charge as equivalent to 300 volts of electrical tension. With that, the erroneous concept crept into electrics that the static tension of an electroscope is of *the same nature* as the volt tension of an electric current.

E. Apart from this conceptual clarification of the quality of the orgone, do you have any clear-cut experimental proofs that the orgone functions according to its own *specific* laws?

O. There are such proofs. So many of these are obtained with the electroscope that we are justified in calling it *orgonometer*. Would you summarize for us the prevailing theory of the discharge of the electroscope, our orgonometer?

E. That's simple enough. Strictly theoretically speaking, a charged electroscope should retain its charge. Experience shows that this is not quite the case. There is a *spontaneous* discharge of charged electroscopes, the so-called "natural leak." It is usually ascribed to the humidity of the air which is assumed to establish a connection between the rod which carries the leaf and the casing. However, there is no consensus of opinion on this point among physicists. But if one subtracts the spontaneous discharge from the measurements made, it is possible to exactly determine the speed of discharge. This principle is always used in radium research. It is the following: *Radiation of any kind electrifies or ionizes the air between the rod and the casing. Since ionized air equalizes electrical potentials more quickly than non-ionized or weakly ionized air, the speed of discharge of the electroscope is an indication of the intensity of the ionization effect.*

O. According to this concept, then, the quantity of an electrical energy from a source of radiation is in direct proportion to the speed of the electroscope discharge. In other words, the more intensive the radiation, the more rapid the discharge.

E. That's right. This is the principle of the measurement of cosmic radiation. In the higher strata of the atmosphere electroscopes discharge more rapidly than in lower strata. This points to a more intensive cosmic radiation in the higher strata. The lower intensity in lower strata is ascribed to the absorption of the cosmic rays by the atmospheric air. But the cosmic rays possess a gigantic capacity of penetration for they have been found, by way of measurement of the electroscopic discharge, deep down in the ocean and in mines. This capacity for penetration is as yet not understood.

O. This concept can be correct only if the prevailing theory of electroscopic discharge is correct. It stands and falls with the theory of the electroscope.

E. You don't doubt the fact, do you, that an electroscope which contains radium or is exposed to Xrays discharges more quickly than an electroscope without such ionizing influence?

O. I don't doubt these facts. But I object to the uncritical application of concepts which are valid in one field to another field. You leave out of consideration the *spontaneous* discharge of the electroscope.

E. Not at all. The air always contains a certain amount of free ions; this amount may be very small, but still large enough to explain the spontaneous discharge of the electroscope.

O. If I remember correctly, the phenomenon of lightning is now explained by "air electricity." But you say that the ion content of the air is very small; otherwise the air could not be a poor conductor, or, to put it differently, a good insulator. How can this statement be brought into harmony with the other statement that such vast amounts of energy can accumulate in the atmosphere that one single bolt of lightning can discharge millions of volts?

E. This is indeed a contradiction which has remained unexplained. One simply does not know where the gigantic amounts of electrical energy discharged in a thunderstorm come from. They are at variance with the very small amount of free ions in the atmosphere.

O. Does it not seem to you that we are meeting here the same impossible equation according to which millions of volts equal millivolts?

E. So it seems, indeed.

O. From the standpoint of the theory of positive and negative electricity, this queer equation is unsolvable. But we know that the atmosphere contains orgone, and that orgone is not electricity, though we do not know what the latter is and how it functions. Let us introduce our orgone and, from now on, carry out our measurements not "electroscopically," but orgonometrically.

E. All right. I admit I am very curious, as I find myself in a tight corner. You are aware that you have to prove quite a lot.

O. I know. What experiment would you suggest?

E. I can only start out from certain known suppositions. One is the acceleration of electroscopic discharge under the influence of ionizing radiation. The existence of an energy in the atmosphere is visually proven. Let us measure the speed of discharge within and without your orgone accumulator. If the speed of discharge is the same inside and out, then there is no difference in the energy concentration. That is, your contention of a concentration of the atmospheric energy in the accumulator would be proven incorrect, and we would be unable to decide the question whether orgone is the same as electricity or not. If, on the other hand, the accumulator concentrates the energy, then there must be a difference in the speed of the electroscopic discharge. If your orgone is the same as electricity, as I am still assuming, then the electroscope will discharge more quickly on the inside than on the outside. Right?

O. Yes, on the proviso that you admit the difference between orgone and electrical radiation energy if the experimental result is neither of the two you mentioned, but a third, unexpected one.

E. Granted. But I do not expect a third possibility. Only the two I mentioned are conceivable.

O. Let's proceed to the experiment. We charge the electroscope, my orgonometer, in each case to the same scale division.

E. . . . The electroscope discharges ***much more slowly*** in the orgone accumulator than on the outside. None of the two predicted possibilities came true. This result is altogether unexpected, and I cannot explain it.

O. For the sole reason that you continue

to approach the orgone function from the theoretical assumptions of electrics.

E. There could be this explanation: the air on the outside circulates more quickly around the electroscope than on the inside of the accumulator; consequently, a greater number of air ions pass by and accelerate the discharge compared with that on the inside.

O. Couldn't that be checked?

E. I shall let the electroscope discharge twice in the open air: one time as is, and one time with the use of an electric fan. . . . I find that *the fan has no influence* on the speed of discharge. After this, I must admit a fundamental difference—even an antithesis—between the atmospheric energy and electromagnetic radiation. But now it is up to you to make comprehensible this result which clearly contradicts the application of electrical concepts.

O. That will not be possible without further observations at the orgonometer. It is easy to see that, say, a Slav, whom we do not know, reacts differently from an Englishman whom we know well. It is much more difficult to define this difference, before one has gotten to know the unknown. You will admit now that one has to rid oneself of the misplaced application of the theory of the two opposite electrical fluids before one can even start really to understand the orgone which is something quite different.

E. I am glad to admit that now. I am very curious what the study of the specific orgonotic qualities will reveal. Have you any ideas?

O. Although I know that the orgone is an energy with specific biological action, and although it would be easy to derive a hypothesis from the specific biological functions of the orgone, I prefer to let the experiment speak for itself. If the experimental results agree with the basic biological functions, all the better. If not, there will be new riddles.

E. I couldn't say at this moment which possibility I would prefer. If there were agreement, this would provide a decisive insight into the riddle of living functioning. If there were not, we would have a lot to think about.

O. The moment of discovery is as exciting as the search. For the rest, we cannot give in to our subjective inclinations. Whether we want to or not, we have to bow to the facts.

IV. VARIATIONS IN ATMOSPHERIC ORGONE CONCENTRATION. A PRELIMINARY INTERPRETATION OF THE ORGONE FUNCTION (AUGUST 1941).

E. I have tried to explain to myself the slower speed of discharge of the orgonometer in the orgone accumulator. I don't know. I thought there might be, somewhere outside of the accumulator, radio-active substances. These might explain the fact that the orgonometer discharges more slowly in the accumulator than on the outside. In that case, the metal walls would keep out the accelerating influence of the radio-active substances.

O. Do you assume that such radio-active substances are to be found *everywhere*?

E. No.

O. You obtain the same result no matter where you place the apparatus. Orgone is present everywhere, even though in varying concentrations. Radio-active substances, on the other hand, are of rare occurrence.

E. That's true. Your theory would be strengthened if the result of a slower discharge with a *stronger* orgone influence could be confirmed in some other way.

O. There is such a confirmation. I found it by chance when, in the summer of 1941, I measured the daily variations of the atmospheric orgone concentration over a period of several weeks.

E. What gave you that idea? As far as I know, such an experiment was never made before.

O. This experiment was made in order to refute the assumption of the influence of humidity or of atmospheric "electricity" on the spontaneous discharge of the electroscope. If you measure the electroscopic discharges every hour, what result would you expect, from the standpoint of the air ion theory?

E. It may be one of two things. First, one might assume that the ion content of the air remains about constant. In this case, the spontaneous discharges of the electroscope would also remain about constant. Second, one could assume that the sun radiation increases the electric charges of the air. For example, the air at high altitudes is strongly ionized, containing much ozone. In this case, one would expect that the discharge of the electroscope would be slowest in the early morning, most rapid at high noon, and again slower toward evening.

O. From the standpoint of your electric theory, this expectation is entirely correct. However, the hourly measurements with the orgonometer show the exact opposite. Do you want to try it?

E. This is too important to be taken lightly. I shall check up on it. . . . I find you are right: *On clear days, the discharge of the electroscope is far more rapid in the early morning than between 2 and 4 PM, and it becomes again more rapid toward evening.* This is at variance with the theory of ionization; on the other hand, it is in accord with the results obtained from measuring the discharge inside and outside of the accumulator. But that doesn't make the result comprehensible. Clearly enough, the ionization theory fails here; it is difficult to think of a different interpretation.

O. Let's leave the interpretation to further observation. Again from the point of view of the ionization theory, what would you expect in the case of cloud formation or of a thunderstorm?

E. In that case, the electroscope would discharge much more slowly because the clouds decrease the ionization of the air by the sun and because they take up electrical charges from the atmosphere.

O. Will you take some measurements? It so happens that there is a good deal of cloud formation just at this moment.

E. . . . Why, I find that the electroscopic discharges become *more rapid* before and during cloud formation. A unit of charge which, during clear weather, takes dozens of minutes for discharge discharges in a very few minutes during strong cloud formation. I am going to check up on this at home on the occasion of the next thunderstorm.

O. Our orgonometer, then, measures orgone, and not electrical charges. Before reaching any theoretical conclusions, I would like to mention a further contradiction in the theory of electricity, a contradiction which is completely solved by the discovery of the atmospheric orgone. Does an electrically charged metal sphere, provided with a metal point, discharge more rapidly or more slowly than a similar sphere without such a point?

E. The sphere with the point will, of course, discharge much more quickly, that is, give off its electrical charge to the surrounding air much more rapidly than a sphere without a point. Every schoolboy knows that!

O. Exactly. Now, another question: How does physics explain the effect of the lightning rod?

E. That too, every schoolboy knows. Benjamin Franklin had observed the fact that metal points take off electrical charges from rubbed electrical substances such as amber or glass. That's what he based his lightning rod on. The metal point takes up the electricity from the charged cloud. It also attracts the lightning and conducts it, being of metal, to the ground, thus protecting the building against the uncontrollable spreading of the lightning electricity.

O. Wasn't there a dispute among the members of a learned commission as to whether the lightning rod should be provided with a sphere or a point?

E. There was, but I don't see why you should mention this uninteresting matter.

O. I only wished to indicate that, as long as 200 years ago, there was an inkling present of the contradiction in the concept of electricity which we are now discussing. Have you been struck by the fact that one and the same theory assumes that a point will *give off* electricity more easily and at the same time, that a point will *absorb* it more easily? Is it conceivable that one and the same instrument should fulfill these two antagonistic functions with one and the same energy?

E. I was never struck by that contradiction, but I would think that many a physicist would have given it thought.

O. Would it be possible to take off electrical energy from a charged sphere by placing a lightning rod at a distance of, say, 1 meter?

E. I don't know, but I would doubt it. The electron tubes and Xray tubes certainly do not contain any kind of points at the anode for the purpose of attracting the electrons coming from the cathode. On the other hand, there is the "electric wind" at a candle flame which is placed between a metal point as cathode and a plate as anode.

O. I do not intend to meddle in problems of electricity. It is not my field. But in order to get anywhere at all I have to separate the orgone—which is well known to me though not to the electrophysicist—from electricity; without doing so, we could not even understand the results of our measurements of the electroscopic discharges. The principle of the lightning rod was gained from the phenomena of "friction electricity." It is strictly at variance with the principle of electricity which is gained through the movement of wires in magnetic fields. We have seen that the old static electricity, or friction electricity, is only a special case of the orgone. The principle of the lightning rod is absolutely correct; only, it has nothing to do with electricity. The lightning rod does not take off "electricity" from the clouds or from the lightning, but orgone, just as does the point at our fluorescent gas tube.

E. That is logical, but will kick up a lot of dust.

O. Suppose it does. The facts are completely in harmony if viewed from the point of view of the orgone functions. They are at variance if they are forced into an all-embracing electrical theory. But now we might venture a first interpretation of the discharges at the orgonometer. Do you think that the well-known principle of the equalization of different levels of charge or tension is applicable here?

E. Water flows from a higher basin, or one with a greater potential energy of drop, to a lower basin with lower potential energy, and not vice versa. This is the principle of the equalization of potential differences. The "tension" existing between higher and lower altitude or stronger and weaker charge constitutes the "potential difference"; the work produced corresponds to the kinetic energy which results from the potential energy in the process of equalization of the potential difference. This is true of the "energy of position" as well as for electrical or caloric energy. A warmer body gives off heat to the colder one and not vice versa. These are some of the most elementary principles of physics and I would hardly expect you to doubt them.

O. Far from it. My only interest is that of investigating, without prejudice, the functions of the orgone energy; in doing so, I cannot let myself be led astray by principles which are valid for other forms of energy. One reason for overlooking the orgone and for misinterpreting static electricity is precisely the fact that the orgone follows different natural laws. Now, according to the basic law of electricity, energy always flows from a more highly charged body to a less highly charged one. What would you expect to happen, then, when you touch an electroscope which is charged with about 200 volts with your finger? As you have seen, we can easily take off from our hair an amount corresponding to about 1000 volts, with one gentle stroke over the hair. Our organism is much more highly charged than the electroscope.

E. According to our theory, the electroscope would become charged to its full capacity from our organism.

O. Please touch this electroscope which is charged in the amount of about 500 volts.

E. It *discharges* promptly and completely when I touch the disc with my finger: *energy flows from the less highly charged to the more highly charged body.* That simply doesn't make sense!

O. It does, indeed, not make sense if you apply your electrical theory to the phenomenon. It does make sense if we realize the validity of specific orgonotic laws of functioning. We must assume that every organism represents an *orgonotic energy system* of its own. A stronger gamete attracts a weaker one, the ovum attracts the spermatozoon, etc.; a sand bion with a strong orgone charge kills an orgonotically weak bacterium, simply by withdrawing orgone energy from it.

E. I don't know anything about biology, so I cannot judge the validity of your statements.

O. The cosmic orgone energy was discovered in the course of studying *the dynamics of the instincts and of sexual-biological functions.* The orgone energy, then, must contain those energy functions which constitute the specific difference between life functions and mechanico-physical functions. The reason why the biologists did not discover the fundamental law of biological pulsation lies precisely in the fact that they tried to apply the laws of chemistry and physics in the realm of the living as they operate in the realm of the non-living. This methodological question will be a matter of polemics between orgone biophysics and the biologists. But it seems to me that the physicist cannot afford to keep himself aloof from the specifically living functioning. Not only because he approaches the processes of nature as the living system which he is himself, but also because there is a form of energy, the orgone, which does not follow mechanistic laws. The overlooking of the specificity of biological energy functions caused also the overlooking of the atmospheric orgone. Physics presumed the rank of the leading natural science even in the realm of biology. It has not come up to such expectations. More than that, I am convinced that the mechanistic concepts of the universe held by physics has blocked to biology the path to an understanding of the life functions.

E. You are getting dangerously close to talking like the metaphysicists who assume the existence of a special "life force."

O. Well, nobody will doubt the existence of an energy or force which governs living functioning. It is only a matter of how one conceives of it and how one comprehends it. Physicists and mechanistic biologists simply deny its existence altogether. Metaphysical biologists divorce the life force completely from the realm of physics and relegate it to the realm of the supernatural. Orgone biophysics solves this conflict: The specific biological energy is nothing metaphysical; it exists physically in the atmosphere, outside of the living organism, and is tangible visually, thermically and electroscopically; it exists, biologically functioning, in the soil and in the living organism. There is a continual process of energy metabolism between the purely physical and the biological form

of the orgone, as seen, for example, in the respiration of plant and animal. The orgone experiments show that the physicist, even though he be not a biologist, could gain much from the knowledge of purely biological functions.

E. As you probably know, a great many physicists are dissatisfied with the mechanistic concept of things. Many are metaphysicists and mechanists at one and the same time. They believe in the transmigration of souls . . .

O. and fight a functional energy concept of the life process. Yes, I have seen that a great many times.

E. The change from a purely mechanistic to functional thinking in physics has not satisfied the physicists' craving for metaphysics. The study of the transformation of chemical elements, and the dissolution of the absolute antithesis of matter and energy, it is true, have shaken the mechanistic world concept considerably; but instead of clarity there is only more confusion now. The gaps which were created in the mechanistic principle of causality have not been filled by a better, more reliable method of thought. I think that if we want to interpret your new findings we will have to go back to the simplest observations which were made in the early days of the theory of electricity.

O. Quite so. It is all too easy to get lost in the ocean of words and concepts which, in the course of centuries, were formed out of a lot of unrelated details.

E. Let us return to the primitive fact that a charged metal sphere *loses* energy through a metal point . . .

O. . . . and, that the same metal sphere can *take up* energy through a metal point. The materials and their form are the same in both cases. Yet, the processes are exactly opposite. It follows, inevitably, that the energy in the one process is not the same energy as in the other.

E. The process by which we charge your orgonometer is that of electrical *influence*. The negatively charged rod of insulating material draws positive electricity through influence into the point and gives off negative electricity into the electroscope leaf, which makes it deflect.

O. Can you describe the *form* in which this function of influence takes place?

E. The process is a continual, gradual one.

O. Now, does the equalization between the negative electricity of the leaf and the positive of the sphere take place one time, or does it occur repeatedly?

E. According to the basic law of electricity, it can be only one time. If, for example, the rubber rod has attracted a freely suspended cork and touches it, the antithetical electrical substances or fluids become equalized. The cork takes up the electricity of the rubber rod and is consequently repelled. It cannot be attracted again without a new manipulation. Otherwise we would have produced the perpetuum mobile!

O. Another theoretical orientation, in my case the orgonotic one, leads to new arrangements which prove the old concept to be erroneous and replace it by a more correct and more inclusive one.

E. There were some electrophysicists who did not speak of positive and negative electricity, but of a *more* of electricity as compared with a *less* of it. Others spoke of an "affluence" and "effluence" of electricity.

O. Let us stop here to discuss the concept of electrical influence. We bring our negatively charged rubber rod close to the point of the electroscope and achieve a deflection of the leaf through "electrical influence." The rubber rod does *not* touch the metal of the electroscope. That is, electricity does not flow from the rubber rod into the metal of the electroscope. The effect of the influence takes place through the air, or, better, as the result of *an electrical field between rubber rod and metal point.*

E. That's correct.

O. Now, I bring my hand close to the electroscope, approaching it from above. If the electroscope is charged, that is, if the leaf is deflected, it begins to move; it goes down when I bring my hand close and it returns to its former deflection when I remove my hand.

E. I see that.

O. If, however, the electroscope is not charged, I cannot produce a movement of the leaf with my hand.

E. After all, your hand is not a charged rubber rod . . .

O. . . . but it is surrounded by an energy field! Why does the electroscope react to the electrical field or the influence by the rubber rod but not to the electrical field, or influence, of my hand?

E. This contradiction has never been explained.

O. There is more to it. As we have seen, I can influence with the energy field of my hand a charged electroscope, but not an uncharged one.

E. I admit that is a riddle.

O. Our electroscope at the moment discharges an amount of energy corresponding to about 600 volts. That is, my energy field, like that of the rubber rod, is capable of strongly influencing the amount of 600 volts, increasing or decreasing it.

E. That's a demonstrated fact. But I don't see what you are getting at.

O. I would like to demonstrate the absurdity of a certain kind of scientific thinking: the method of drawing conclusions from *isolated* phenomena, *without making comparisons.* Please connect the poles of this 6-volt battery and see what happens at this voltmeter.

E. It shows 6 volts.

O. Now bring the rubbed polystyrene rod close to the wire, and then your palm.

E. . . . There is no reaction.

O. Exactly. Now, according to your theory of electricity, it should be possible that our palms or the rubbed polystyrene rod definitely disturb 600 volts by influence while at the same time they cannot influence 6 volts. Such a thing cannot be possible. The wire contains electrons, and so does the metal of the electroscope. The electrons of the electroscope, then, should be set in motion by influence, while those of the wire are not?

E. Well, in the wire the electricity *flows,* while in the electroscope it is *static.*

O. Will a whip get a standing horse going but not influence one that is in motion?

E. I admit the contradiction, but there are plenty of unsolved problems in electrophysics.

O. All the more incomprehensible is the arrogance of so many of its representatives. The point is this: The field effect of the palm and the rod, which you call influence, is due to an *orgonotic energy field* and not an electrical one. Otherwise, my palm would disturb the 6-volt tension just as it does the 600-volt tension. Now let us try to understand the purely physical functions of the orgone by approaching it from the angle of *biological* observation. Two organisms of different sexes show "sexual attraction." If we take the energy conception of such fundamental processes as sexuality seriously, we must consider the *attraction in sexual excitation an orgonotic energy process.* From a strict functional point of view, there is no process without its counterpart. The counterpart of attraction is *repulsion.* Repulsion, also, is a function of sexuality. Two copulating organisms, after attraction has taken place, remain attached to each other until an energy discharge takes place in the orgasm, in which the sexual substances, as a result of repeated muscular contractions, are expelled. After this has occurred, the organisms detach themselves from each other.

E. That seems very far-fetched to me. Do you mean to say you wish to construe

a relationship with the attraction and repulsion of the electroscope leaf?

O. Not so fast. The sexual processes are not determined by positive and negative charges. The male and the female organisms are not charged with "opposite" charges, but they are both *excited* by the same unitary energy. This energy clearly shows two antithetical functions: attraction and dissociation (or repulsion). There is no reason to assume the existence of two separate substances or fluids for these two antithetical functions. As the experiment shows, it is one and the same orgone energy which functions in two antithetical directions or ways, like this:

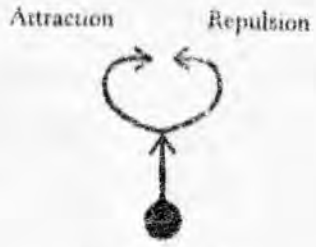


FIG. 6. Attraction and repulsion as antithetical functions of the orgone energy.

E. If this is not just a new hypothesis added on to a thousand others, if your hypothesis explains known facts better than my hypothesis, and if it explains new connections, I shall agree. But let's not get too far afield. We started with the question: What is the principle according to which the discharge of my electroscope—your orgonometer—takes place if the principle of the equalization of potential differences is not applicable?

O. I had a good reason for leading up to this question, but could not do it very well without the detour into biology. These biological considerations help the orgone-physical experiment; they carry us further and fulfill your demands for the justification of a hypothesis.

E. I am eager to see your experimental proof.

O. We shall carry out this experiment in the dark orgone room. Please take orgone from your hair, and bring the excited polystyrene rod as close to this tubular fluorescent argon lamp as about 5 cm. Then keep your hand steady.

E. . . . I have done so several times. Nothing much happened, except that a small area of the lamp began to glow once.

O. Now carry out another experiment: Hold the rod at a distance of about 30 cm from the lamp, then bring it close to the lamp, so as to almost touch it, and remove it again. Repeat this as often as you please.

E. . . . As I come close, the lamp glows several times; this happens at shorter intervals as I come closer. If I hold the rod quiet at the same distance, nothing happens. If I move it away from the lamp, it glows again, several times in succession. The more frequently I repeat the movement of the rod to and fro, the lighter does the lamp become.

O. Now move the excited rod along the lamp, lengthwise and evenly.

E. . . . There is an irregular flickering. The glowing of the argon is intermittent and does not seem to be a direct result of the even movement of the rod.

O. These phenomena cannot be explained by a uniform electrical influence from the rod to the gas or its ions. Otherwise, the lamp would glow as long as electrical energy from the rod influences it. Then, when the electrical energy was discharged, the glowing would disappear. On the other hand, these phenomena are in full accord with the basic functions of living systems. The lamp glows only when the rod is brought closer to it and when it is removed again; it does not glow when the rod is not being moved. A muscle contracts only when the galvanic current is turned on and when it is turned off, not when a steady current is sent through it. In addition, it does not contract according to the electrical stimulus, but according to its bio-energetic structure. In response to the same stimulus, the striated muscle contracts rapidly, the smooth muscle slowly and in a wave-like manner. The contraction of the muscle is only precipitated by the turning on and off of the current. The energy of the contraction, however, lies in the muscle itself. It is not the electrical energy supplied from the outside which is expressed in the contraction but the biological energy in the muscle which is stimulated by the turning on and off of the current. In our experiment, you brought an orgone-excited rod close to the fluorescent lamp and removed it again. The lamp "luminates" when the orgone charge is *moved* but not when it is at rest. This phenomenon of *lumination*, as we call it, is based on an *alteration* of the field of the energy in the rod, and not on the static influence of the energy field.

E. I understand. You leave the field of the positive and negative fluids or substances and enter the field of moving energy fields. Would you equate "energy field effect" and "charge"? You said that the orgone "charges" the orgonometer.

O. You will admit that it is extremely useful occasionally to go back to the most elementary concepts. As a matter of fact, I do not believe that the orgone rod "charges" the orgonometer, but that, by way of the moving orgone field, it *"excites"* it. Typically, this excitation occurs only when the contact of the energy field with the excited substance is *established* and when it is *interrupted*. The fluorescent lamp luminates only when the rod is brought close and when it is removed. If we move the energy field lengthwise along the lamp, there is a sequence of contacts and contact-interruptions. Accordingly, the lamp flickers; it luminates and stops luminating intermittently.

E. Faraday did not succeed with his induction experiments until he hit upon the idea of turning on and off the current in the primary coil, in other words, of making excitations and fields of excitations *appear* and *disappear*. The secondary coil develops a current only with the appearance and disappearance of the energy field in the primary coil; it does not react to a constant current.

O. This is probably the place where the riddle of the connection between orgone and electrical current has to be looked for. But let's not go into that now. We shall only remember that there is a functional resemblance between the contraction of the muscle when the current is turned on or off, the induction current in the secondary coil with the turning on or off of the current in the primary coil, and the lumination of our argon lamp when the orgone rod is brought close or removed. In all three cases, the process is dynamic, that is functional, and not static. It is not a matter of one discharge of positive and negative electrical particles, but of a repeated attraction and dissociation in the excited substance.

E. Can you demonstrate this experimentally?

O. Yes; after having freed myself of the static concept of the two separate electrical fluids, I found a way of experimental demonstration. Instead of the rigid and heavy, and therefore clumsily moving, aluminum or gold leaves we use two thin silk threads. These we attach to a metal rod; we then interrupt the conduction from the metal rod to the metal knob by an intermediate piece of hard rubber or plastic, and bring our orgone rod close to the knob. Do you want to try it?

E. When I bring the rod which was excited with hair orgone to the knob, there are several successive attractions and repulsions of the silk threads. The same happens when I take the rod away. The reaction reminds me of contracting frog's

legs. At first I felt like rejecting this comparison.[1]

O. Nevertheless, it is entirely correct. In addition, you have reproduced the phenomenon of lumination in a *mechanical* form. The silk threads remain immobile when you do not move the rod. They move back and forth when you bring the rod close and when you remove it again.

E. This demonstration is simple and convincing. I admit that in this case the assumption of two electrical fluids does not apply. What we see is not a single attraction with consecutive repulsion, but repeated attraction and repulsion. What is your conclusion from this observation?

O. We must assume that every *establishment of contact* and every *interruption of contact* in the energy field goes with two opposite functions in the excited substance: *appearance* and *disappearance of excitation*. The fluorescent lamp luminates and ceases to luminate; in the secondary coil a current appears and disappears: our silk threads attract and then repel one another.

E. In brief, you replace the attraction of the positive and negative electrical charges by the attraction of two orgonotically excited substances which are exposed to the influence of one and the same orgone energy. Furthermore, you replace the repulsion due to two negative or two positive electrical fluids by the repulsion or dissociation of two orgonotically excited bodies due to the disappearance of the excitation or lumination.

O. The observation of the processes of biological excitation allows of no other conclusion. The copulation and separation of two biological individuals are the prototype of the phenomenon. The phenomenon of the attraction of two orgonotically excited systems is clearly and simply demonstrated to us in the realm of biology. The phenomenon of dissociation is more complex.

E. We started out from the fact that the slower speed of discharge of the electroscope in the orgone accumulator and around noontime cannot be explained on the basis of the ion theory. But neither do I see how the function of attraction and repulsion of the orgone energy explains the phenomenon.

O. In the early days of orgone physics, I tried to explain the slower discharge of the orgonometer in the accumulator by the principle of the potential difference. I assumed that the electroscope could discharge less easily into an atmosphere with a high orgone tension than into one with a low orgone tension. However, this assumption had to be dropped. Since it is always the stronger orgonotic system which withdraws energy from the weaker one, there can be no potential difference in the sense of mechanics (from higher level to lower level) or electrics (from higher tension to lower tension). Another assumption was more in accord with the facts: the orgone-excited orgonometer gives off orgone to the surrounding air and, at the same time, takes up orgone from it. *Emission* and *absorption* of energy take place simultaneously. A vacuum tube in the orgone room takes up orgone and at the same time emits it. That is, we must give up the customary concept of potential difference and must assume a simultaneous emission and absorption of orgone energy. I suggest that we postpone the application of this new concept to the spontaneous discharges of the orgonometer until such time when further observations have made us more familiar with the characteristics of the orgone functions.

[1] *Translator's note:* It seems indeed peculiar that the movement of a pair of silk threads should remind one of a biological movement. I well remember my amazement when I saw this experiment for the first time. Yet, my immediate impression was that of moving frog's legs. The witnessing of such experiments which again and again demonstrate the functioning of a unitary energy both in the physical as well as the biological realm is one of the most impressive experiences.—T. P. W.

Thus far, at any rate, we have established the following pairs of functions:

1. *Absorption* and *emission* of orgone;
2. *Attraction* and *repulsion* of two orgonotic systems;
3. *Lumination* and *cessation* of lumination in the moving orgone field.

V. ORGONOTIC ATTRACTION AND REPULSION (CONTRACTION AND EXPANSION) IN THE ORGONE ENERGY FIELD (1942).

E. Since our last discussion I have convinced myself that the speed of discharge of the orgonometer increases shortly before a thunderstorm; during a storm, several scale divisions discharge in seconds or even fractions of seconds instead of in half an hour or even hours as usual. This confirms your observation, which opens a new avenue of approach to the problem of weather formation. This observation cannot be explained away. At any rate, it is more interesting to participate in this breakthrough into unexplored realms than to refuse to do so as I did in the beginning. Your art of interpretation is contagious: could it be that the orgonometer functions *biophysically* when in good weather it maintains the deflection longer than in bad weather? After all, it registers biologically effective physical energy, so why should it not react biophysically?

O. I don't quite see what you mean.

E. In good weather, an animal stretches out comfortably, in bad weather it retreats into itself. That is, it *expands* and *contracts* according to the weather, entirely in accord with the function of orgonotic attraction and dissociation of the particles.

O. I am glad to see that you thought this out to its logical conclusion. When I had to reject the original mechanistic interpretation of the speed of discharge, I was at first at a loss. Gradually, I formed the idea which you just put forth. I did not mention it last time because I thought it might disturb our friendship. But I think it is entirely justifiable to say: *With high atmospheric orgone tension the deflection lasts longer because the orgonometer leaves can expand and dissociate longer.* Biophysically speaking, they "feel better" in a high orgone concentration than in a low one. In other words, we are not dealing with potential differences as in the case of mechanical or electrical energy, but with strong or weak attraction and dissociation. Now, biophysical pulsation consists of rhythmically alternating expansion and contraction. The expansion of the orgone corresponds to the dissociation or repulsion of the orgonotic particles, the contraction corresponds to their association or attraction. Do you consider this conclusion justified?

E. Yes, it is theoretically correct, but can hardly be demonstrated experimentally. In order to demonstrate it, one would have to make a *non-living* system expand and contract rhythmically, and that cannot be done.

O. It is possible to reproduce the dissociation of the particles in the form of a *repulsion* and the association in the form of an *attraction* of the particles. It is not yet possible, though, to produce attraction (contraction, association) and repulsion (expansion, dissociation) *alternatingly in one body*. That would be the same as producing a homunculus. It is possible, however, to reproduce these two basic orgone functions *separately*, that is, in different substances.

E. This would indeed be an important practical step beyond mere theory. What are the experimental arrangements?

O. They are simple. But to remain with the concepts for a moment: Repulsion and attraction are *energy functions;* they are the basis of the corresponding *changes in the state of matter*, disintegration, dissociation, association, cohesion. According to this, the *state of matter is determined by the relative function of its energy.*

Now let us demonstrate the functions of repulsion and attraction. We connect

this iron sphere of about 3 cm diameter with the metal rod of the orgonometer by way of a wire. On each side of the sphere, at a distance of about 2-3 mm and at the height of the equator, we suspend a substance in pendulum form. For a reason to be explained later, I suggest 16 cm as the length of the pendulum. The pendulum on the left carries a small piece of cork, that is, an organic substance; that on the right, a thin tin foil of about 5 mm length. As you see, the pendulums do not move at all. Now please charge the orgonometer.

E. . . . The piece of cork moves toward the metal sphere and adheres to it. The tin foil was first attracted but then immediately repulsed again.

O. Did the tin foil return to its original vertical resting position?

E. No, it is *being kept away* from the metal sphere. That is, the orgonotically excited metal sphere has *attracted* the piece of cork and holds it fast, while it *repels* the tin foil and keeps it away.

O. Please continue to charge.

E. The cork continues to adhere to the sphere; the tin foil is kept away at an *increasing* distance. That is, we can observe how the repulsion increases; the increase in the attraction of the cork we can only surmise but not observe.

O. One and the same excitation of the metal sphere has an antithetical effect: it repels the metal and attracts organic material. According to your theory of the two electrical fluids which are present in the metal *and* in the organic substance, the effect would have to be the same in either case: first attraction, then repulsion, in the case of the metal as well as that of the cork. Our experiment produces the two reactions separately.

E. The orgone energy, then, is composed not of two antithetical fluids, but of *two antithetical functions, attraction and repulsion;* and each of these functions *has a specific relationship with the nature of the substance.* In chemistry, one knows metals, metalloids and carbon compounds . . .

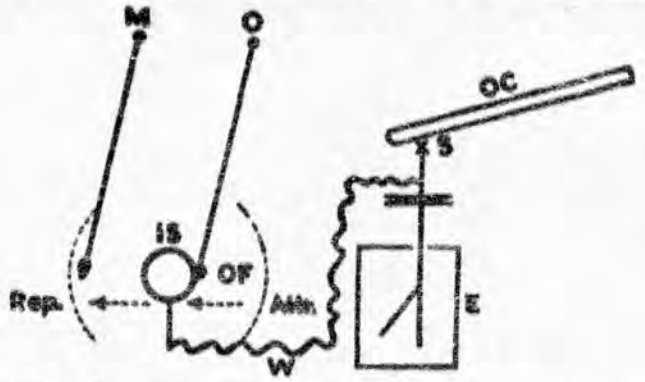


FIG. 7. Demonstration of orgonotic attraction of organic and orgonotic repulsion of metallic material.

O: organic material.
M: metallic material.
OF: orgone energy field.
IS: iron sphere.
Attr.: attraction.
Rep.: repulsion.
E: electroscope (orgonometer), grounded or not grounded.
W: wire connection.
OC: orgone carrier (polystyrene rod).
S: spark to the tip of the electroscope.
←: direction of deflection.

O. I must interrupt you here. Let us postpone the discussion of these relationships to the chemical function. It has to do, among other things, with the energy function of chemical affinity. For that, we are not yet prepared. Let us confine ourselves to the conclusions which can be drawn from this one experiment, otherwise we would get lost in speculation. Let us introduce into our experiment a second metal sphere which is connected with a second orgonometer. Sphere II is at a distance of about 1-2 cm from sphere I. Exactly in the middle between the two spheres is suspended a small piece of cork through which thin pieces of iron and copper wire have been stuck in all directions: It represents a combination of organic and metallic material which we shall term MO. On the free side of sphere I we have the tin foil, on that of sphere II a piece of cork. Please charge orgonometer I with orgone from your hair.

E. . . . The combination MO oscillates back and forth between the two spheres. Each sphere alternatingly attracts and repels it. The tin foil (M) is repelled and kept away by sphere I, while the cork (O) is attracted and held fast by sphere II. I notice that the orgonometer II, without direct influence, has become charged spontaneously. How do you explain that?

O. The *total system* is charged with orgone. Each spark from the rod to the orgonometer tip has added a certain amount of orgone energy to the total system. *Orgone energy fields* were formed around both spheres. The tin foil (M), influenced by only *one* orgone field, was repelled and is being kept away. The combination MO oscillates back and forth because it is influenced by *both* fields, in the sense of both attraction and repulsion.

E. Let us ground the case of orgonometer I . . . The total system gradually becomes discharged. Let us repeat the experiment by charging orgonometer II

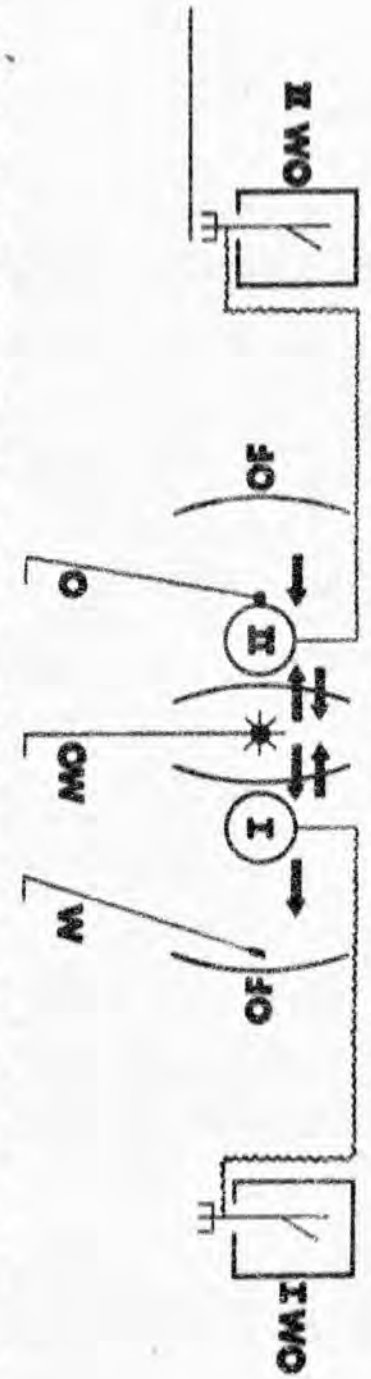


FIG. 8. Demonstration of the orgonotic functions of repulsion and attraction.

OM = orgonometer; OF = orgone energy field; I, II = iron sphere I and II; M = pendulum with metallic material; MO = pendulum with combination of metallic and organic material; O = pendulum with organic material.

. . . We obtain the same result as with charging orgonometer I.

O. Let us put the tin foil (M) between the spheres instead of the combination MO. Now charge sphere I.

E. The tin foil oscillates between the spheres.

O. Discharge both spheres by touching the orgonometer tips. Then charge sphere II alone.

E. During the discharge, the tin foil kept still. It began again to oscillate when I charged sphere II alone.

O. Let us again discharge both spheres. Then we charge them alternatingly with one spark each, that is, *evenly*.

E. . . . *The tin foil does not oscillate, but remains still in the middle. That is, it is held fast by the two repulsion fields between the two spheres.* I shall check up on this. If the interpretation is correct, the tin foil must move toward sphere I and not toward sphere II when I reduce the charge of sphere I. . . . It does. When I charge sphere I more strongly than sphere II the tin foil moves from sphere I toward sphere II.

O. Another check consists in discharging one of the spheres completely.

E. I discharge sphere I. The tin foil oscillates vigorously between the spheres. . . . I discharge sphere II also. . . . The foil no longer moves.

O. Organic material is attracted and held fast. Metal is attracted for a moment and then steadily kept away. Consequently, *the combination (MO) will be neither attracted nor be kept away; it only oscillates somewhat.*

E. . . . MO oscillates vividly between two charged spheres; near *one* charged sphere it swings slightly back and forth. The energy field of *the one sphere* attracts MO *a little*. The complete attraction of the organic material is contradicted by the repulsion of the metallic material. The sphere does not keep MO steadily away as it does M, for the O in MO contradicts the repulsion by attraction. These experiments are clear. They prove the repulsion of metallic substances and the attraction of organic substances in the combination MO also. What happens with organic material between two spheres?

O. O, unlike MO, does not oscillate, nor does it stay still like M, but it adheres alternatingly, and for a considerable time, to one sphere and then to the other. This is accompanied by phenomena which I do not yet understand.

E. Nobody would ask to have every detail of a new experiment clarified all at once.

O. I would like to stress two facts emerging from these experiments particularly:

1. When the movement of the pendulum has already subsided and the spheres are discharged, it can begin again if one touches the connected orgonometer with one's finger. It reminds one of the lumination with *contact interruption*, but it is not quite understandable yet.

2. If we arrange MO with *one* metal sphere we observe, when we excite the latter, not only a pendulum movement, but also a *rotating or torsion* movement of MO. This also is not understandable. But we shall have to keep this rotation in mind; nobody can predict in what connection it will prove significant.

E. You observe very well. I had seen both phenomena but did not mention them. Could it not be a matter of mechanical disturbances?

O. No, for I have been able to reproduce them under different circumstances.

Now, according to the theory of electricity, an electrical charge is transferred by influence from the charged to the *non-charged* body. An amber rod, when rubbed, attracts pieces of paper. Let us transfer this theory to our palm. We must assume it to be charged. But it does not attract the freely suspended metal foil. How do you explain this?

E. I have no explanation for it.

O. Please produce an orgone energy field around the metal sphere so that the tin foil is repulsed from it.

E. Done.

O. Now bring your palm close to the tin foil slowly and remove it again.

E. . . . Every time I bring my hand close, the tin foil approaches my hand and goes back again when I remove it.

O. The charge of your hand has not changed. Your hand exerted no attraction on the tin foil *as long as the tin foil itself was not in an orgone energy field. But as soon as this was the case, the attractive effect of your hand appeared.* If it were a matter of electrical influence, the effect would have had to be present from the beginning. It was not. It appears when *two orgone energy fields*, that of the sphere and that of your hand, come into contact with each other.

E. These phenomena are not understandable from the point of view of electricity. There can be no doubt that orgone is fundamentally different from electricity. A simple logical confirmation of these facts occurs to me. The orgone is present everywhere in the atmosphere and in all substances. It must also be present between the wires of a telephone or high tension conduit. The wires are not insulated. If they were, this would not change anything anyhow, since the orgone penetrates insulating materials. If orgone were simple electricity, there would be conduction between the wires and there would be discharges and electrical disturbances. Telegraph and telephone would be an impossibility. All this is not the case. The orgone, then, does not establish a conduction between the telephone wires, and can therefore, logically, not be electricity.

O. This is a very important critical objection to the thoughtless application of the concept of electricity. If orgone were the same as electricity, insulation by air and insulating materials would indeed be impossible. I suggest to postpone the discussion of the relationship between orgone and "dielectricity" until another time.

E. I had to think of this relationship myself. It has remained obscure why different insulators act so differently when placed in the field between two condenser plates. The difference of the dielectricity constants is a riddle.

O. We are not yet prepared to discuss this.

E. I see. I begin to realize that your discovery is far more significant for the theory of electricity when one realizes that the orgone is an energy different from electricity.

O. There are many still hidden approaches to the biological energy. Several years of hard experimental work showed me that the current theory of electricity not only failed to provide an avenue of approach to the problem; rather, it always led one astray. This I would like to illustrate with an anecdote: My first biophysical experiments in humans were done in 1935, with the assistance of a physiologist from the Kaiser Wilhelm-Institut in Berlin. We had to find out whether the erogenous zones of the body surface, when biologically excited, showed an increase of their bio-electrical potential compared with an indifferent place of the body surface. I had already observed the increase of the potential with pleasurable vegetative excitation and asked my assistant to carry out further experiments while I went abroad for a lecture course. When I came back six weeks later, my assistant told me that "nothing had shown" at the erogenous zones, that there was no increase of potential with pleasure, and that therefore my hypothesis was erroneous. I asked him to demonstrate his experimental procedure. For six weeks, with the greatest precision, he had fastened glass cups over the subject's nipples with adhesive tape. The glass cups were

filled with electrolyte fluid and supplied with electrodes which were connected with an oscillograph. Mechanically speaking, the arrangement was faultless, absolutely correct in every detail. Only one fact had been overlooked, and that was the decisive one: *No living organ gives a pleasure reaction if one ties glass cups to it with adhesive tape!*

E. If I understand you correctly, this means that mechanistic methods, taken from the realm of the non-living, are not applicable in the case of phenomena of biological excitation.

O. That, precisely, is my contention. It is based on a great many disappointing experiences. *Living matter functions basically differently from dead matter.* My assistant had excellent training in mechanistic concepts and methods, but he did not know what to do with the biological concept of "emotion" and had no realization of the faultiness of his procedure.

E. That is, you first used mechanistic methods which failed and had to work out new methods which were in keeping with the biological functions?

O. Precisely. But that in itself was not sufficient. Since the *biophysical* laws can be deduced only from the observation of *biological* processes, the *methods* of observation and experiment must also be *biological.* We work with the living organism in order to gain indications of the nature of the orgone energy. On the other hand, we must also work with other material in order to arrive at the *purely physical* orgone functions. Ideally, the orgone-physical experiment should convincingly demonstrate living energy functions. *The biological orgone experiment must agree with the purely physical experiment.*

E. The hypothesis of the two separate electrical fluids, then, led nowhere. The organism does not contain two poles, one charged negatively and the other positively, and there is no equalization between negative and positive charges.

O. True, there are higher and lower charges. But there is no flow of energy from the higher to the lower charge. On the contrary, the specific biological mechanism is that of an *energy flow from the part with weaker to the part with stronger excitation.* The strongly excited pseudopodium of an ameba attracts plasma from the non-excited parts of the organism. This is what leads to the flowing of the total plasma, the "crawling." There is *lumination* ("excitation," "emotion") which is unipolar and has nothing to do with potential differences. Nor is there any equalization of positive and negative charge.

E. You have replaced the *attraction* of positive and negative electricity and the *repulsion* of positive and positive, negative and negative electricity, respectively, by the antithetical functions of *attraction and repulsion.*

O. The theory of electricity assumes that the antithesis of positive and negative develops from a *neutral* condition. In the living organism, the concept of a neutral condition is not applicable. The living organism is never completely at rest like, say, a dynamo. *The unitary, always functioning biological energy works in two antithetical directions* as *attraction* and as *repulsion of the particles in the living plasma or the colloid.* The repulsion of the particles expresses itself as *dissociation* or *expansion,* the attraction as *association* or *contraction.* Orgone biophysics had to demonstrate, *purely physically,* these two antithetical functions of one and the same energy. This demonstration did not succeed until, after innumerable failures, the electrical concepts were discarded and the experiments were carried out purely from the standpoint of biological attraction and repulsion.

E. A piece of leather, a glass rod and a piece of tin, put together on a table, do not mean anything until the searching intellect puts them into some relationship with each other. It is necessary to rub the glass rod with the leather in order to produce a movement of the tin foil.

O. One of the greatest hindrances of research is the fact that science always stops at separate individual facts which it does not really understand. Scientific search is essentially the establishing of an intelligible connection between individual facts. *The problem of the biological plasma pulsation reduces itself to an alternating expansion and contraction, that is, alternating repulsion and attraction (or dissociation and association) of the particles of the living colloid.*

When sex-economy began to comprehend the basic pulsatory function of the autonomic life system one was surprised to see how the infinite findings of physiology and biology were without comprehensible connections. As you know, the *formula* of plasmatic functioning, of the four-beat TENSION → CHARGE → DISCHARGE → RELAXATION was not discovered by experiment but by thought. The unification

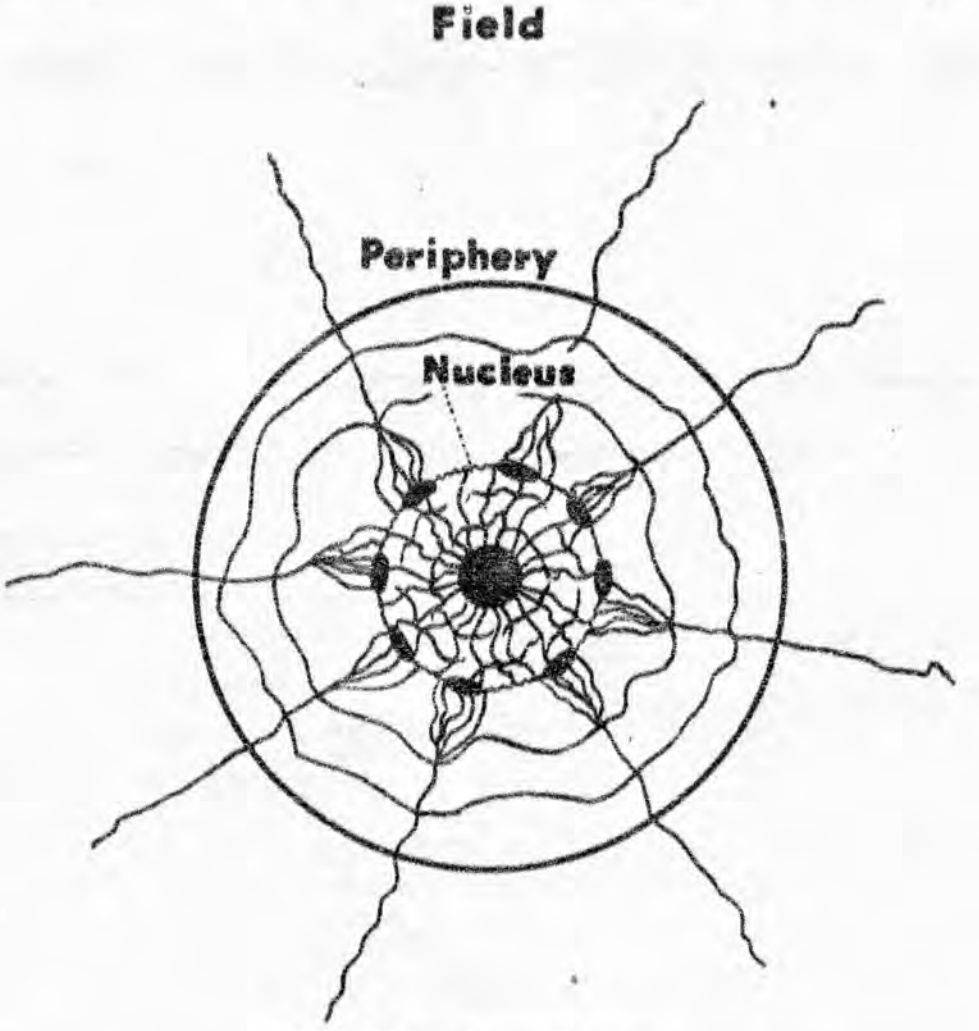


FIG. 9. Schema of orgonotic system.

of the known facts of physiology was later confirmed by the bio-electrical experiments at the erogenous zones.

E. Let's remain with the theory. In order to follow your experiments I have to comprehend your theoretical standpoint. Otherwise I could easily explain away your individual findings by wild individual interpretations.

O. Nothing is easier than to take the individual facts out of their context, to separate them from the basic theory and to find a special "explanation" for every individual fact. For example, if you bring your hand close to the charged electroscope, the leaves collapse; that is "the effect of capacity." If you bring the rubbed rubber rod close, the leaves deflect; that is "the effect of influence." If you connect the electroscope casing with grounded metal the deflection increases; this is "the effect of the negative charge of the earth on the positive charge of the leaves." If one brings the orgone rod close to an electric tube and removes it again, the tube flickers; this is "the effect of ions." If there is a bolt of lightning between cloud and earth, this is a discharge of "positive cloud electricity and negative earth electricity." If, however, there is a bolt of lightning between two clouds, without contact with the earth, lo and behold, suddenly there are clouds not only with positive but also with negative charge. The lightning contains millions of volts while the air contains only traces of electricity. Well, then it was "the effect of the electrical charge of the surface of the droplets" . . .

E. That's enough! I know there is a magic of words which—in physics no less than elsewhere—is taken for scientific explanation. But we want to get at *new facts.*

O. I cannot pass over the magic of words as easily as you. For many years, it was used against me with great dignity and authority at every step I took, until finally I lost my respect for it and determined to declare orgone research autonomous and independent. When I demonstrated the pulsation of the bions microscopically, it was said to be a matter of "Brownian movement," although this cannot explain the pulsation. The SAPA bions which opened the way into the realm of the orgone energy were called "only sarcinae." Character-analysis was called "old stuff" or "all wrong." Vegetotherapy, to which we owe the formula of living functioning, was called "simple massage." With regard to the orgone accumulator, many physicists said that "of course" a metal cabinet was warmer, without substantiating such a statement. That is, one cannot get around the magic of words; one has to overcome it.

E. Let's overcome it by the solution of problems, and by a correct instead of a verbalistic solution. One of these problems is why these phenomena, unequivocal as they are, have not struck any physicist or astronomer thus far.

O. You are mistaken. The atmospheric orgone has been seen and described by hundreds of physicists, astronomers, meteorologists, biologists and chemists. That the orgone was not discovered in a practical way long ago is due to the mechanistic splitting up of the natural sciences, the mechanistic verbalizations which were taken for explanations, and the lack of functional, that is, unitary thinking.

E. I don't get you.

O. One and the same phenomenon, the wave-like flimmering of the atmospheric orgone, has been sighted and described in meteorology as well as in astronomy. Meteorology, observing the atmosphere mainly during the *day,* knows the atmospheric orgone as "blue haze" and "flimmering as a result of evaporating water." Astronomy on the other hand, making its observations mainly at *night,* knows the orgone under the designation of "diffuse light" and as a disturbance in astronomical observation which is called "bad seeing."

Geologists and physicists know the atmospheric orgone as "flickering in the sky due to terrestrial magnetism." The physicist, in addition, knows the orgone as "static." The astronomers and physicists have experienced the atmospheric orgone mainly as a disturbance. The spontaneous discharge of the electroscope is a natural expression of the atmospheric orgone. The physicist calls it the "natural leak" and *excludes* it because it disturbs his calculations of ion effects. Orgone lumination at the mast of a ship is called "St. Elmo fire"; lumination at the height of some hundred kilometers is called "aurora borealis" but at the height of a few hundred meters it is called "heat lightning." The orgonotic flickering at the walls of a room is called "merely a subjective optical impression." The blue of the sky, an unequivocal orgone phenomenon, is "merely absorbed blue sunlight." The blue-green coloration of the protoplasm is "merely a phenomenon of refraction." The lumination of fire-flies is merely the luminescence of a substance called "luciferine." The lumination of disintegrating wood in the dark is "merely a phenomenon of putrefaction."

If natural science were not mechanistically split up, if it did not operate, to its great disadvantage, with a plethora of concepts, then the astronomer, the geologist and the meteorologist would long since have arrived at an understanding of the flickering in the atmosphere. The astronomer would have found that the stars in a planetarium also flicker. The physicist, together with the meteorologist, would have found that there are certain laws according to which the spontaneous discharge of the electroscope varies; that, for example, the speed of discharge increases with cloud formation and before rain and decreases with strong sunlight in the afternoon. The triumph of the new scientific method of *energetic functionalism* was that of having brought together in *one unit* the many separate forms of expression of the cosmic energy. This theoretical comprehension led to the construction of the orgonotic cabinet, with that to the locally delimited reproduction of the flickering in the atmosphere and, further, to the thermical and electroscopic demonstration of the cosmic energy.

E. This only shows that the theoretical unification of different and widely disparate phenomena leads to new experiments which in turn confirm the theory.

O. The path to the discovery of the orgone was in reality a different one, starting, as it did, from the bionous structure of any substance which has been made to swell. But it might have taken the course you indicated.

E. How about discussing the thermical manifestations of the orgone next time?

O. Gladly.

VI. ORGONOTIC HEAT (MAY 1939-FEBRUARY 1944).

E. I am most curious about your demonstration of orgonotic heat. There are many gaps in the physical theory of heat. For example, the heat developed by the sun is still not understood. It cannot be simple combustion heat, otherwise the sun would have burned out long since. The sun's loss of mass by radiation amounts to about 4.2×10^{12} gram/sec. This corresponds to about 4.200.000 metric tons, or 1% of its mass in 150.000 million years. The earth alone constantly receives about 2 cal. of heat per cm^2 every minute. In order to understand these gigantic amounts of radiated heat energy one has assumed that it is not a matter of heat from combustion, but of *subatomic heat,* that is, heat from disintegration of matter.

O. Has anybody tried to explain how it is possible that the heat radiated by the sun into the universe does not get lost

on the way to the earth, a distance of about 149 million kilometers, why there is not a rapid equalization with the temperatures of the universe which are near absolute zero?

E. I do not know of any such consideration, but it is undoubtedly important. Have you an opinion about it?

O. The discovery of the orgone has led to some surprising clarifications.

E. I just remembered the fact that you can easily charge your orgonometer through exposure to sunlight to the amount of many hundred volts. That must mean that the sun radiates orgone energy directly to the earth. It is *orgone energy and not heat which manifests itself at the orgonometer.* As we know, heat is only *a form of manifestation* of energy anyhow, and not energy itself. But I cannot as yet think of a connection between orgone and heat. As you have found out, orgone penetrates all substances. In caloric research, one finds always the same thing: all temperature differences result in an equalization from the higher to the lower temperature which takes place more or less fast or slowly according to the conductivity of the substances involved. Since, now, the orgone is present everywhere, only in different concentrations, one should have found such differences, which is not the case.

O. The demonstration of such irregularities in the equalization of temperature succeeds only if one imitates, in miniature, the arrangement of materials of a planet such as our earth. Then one finds indeed *a constant temperature difference without a constant source of heat of any known kind.*

E. I was prepared for all kinds of surprises, but this would really be a bombshell.

O. I am afraid that when this "bombshell" is going to explode, many a physicist will dig in behind an impenetrable

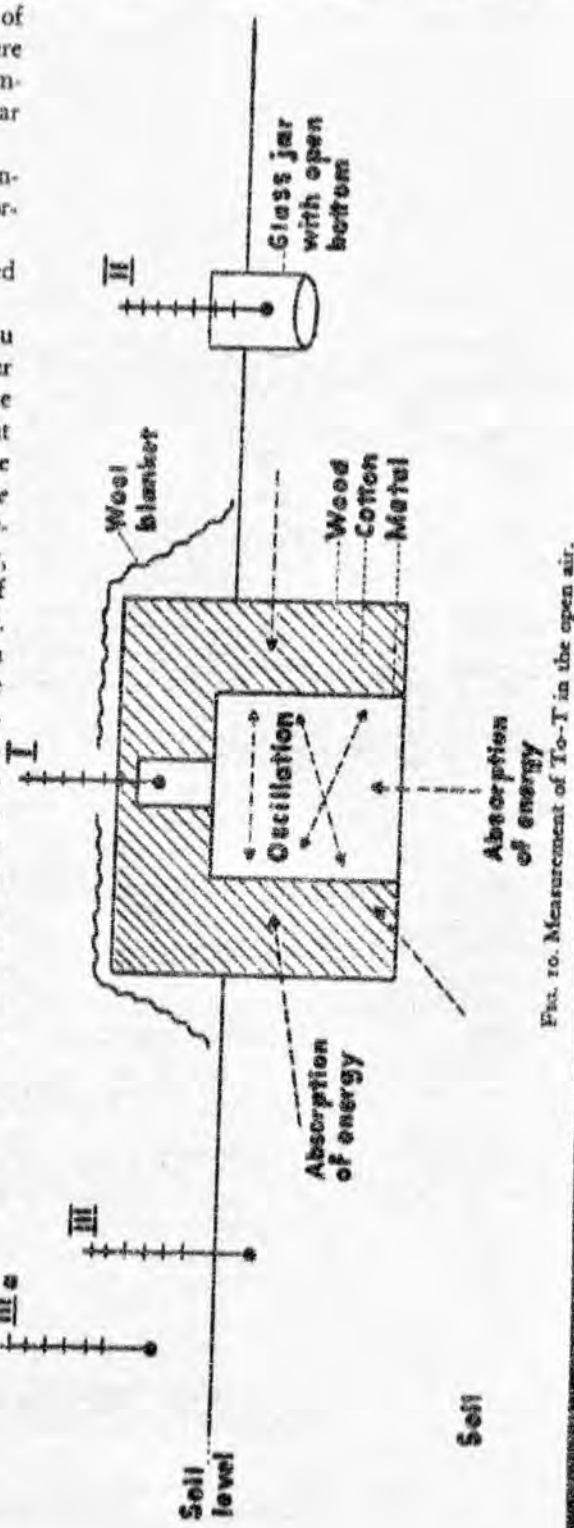


FIG. 10. Measurement of To–T in the open air.

wall of "interpretations" which are to explain the phenomenon away.

E. You are too pessimistic.

O. I am speaking from experience. But first let us convince ourselves that the rule of the equalization of all temperature differences is correct. Here are four very exact decimal thermometers. Please put their points about 2 inches below the surface of the soil. You may choose shady or sunny spots; the thermometer *tips* are protected from direct sunlight in either case.

E. I prefer a sunny spot . . . *The four thermometers show the same temperature.*

O. Now we bury this apparatus in the soil. The apparatus consists of an exterior box of wood and an interior box of sheet iron of 1 cubic foot. It is a good idea to use an apparatus consisting of two or three such layers. In the top of the box we insert a glass cylinder which has a small opening for the insertion of a thermometer. The whole thing is covered with soil so that the apparatus itself is not exposed to the direct sun rays. Will you measure the temperatures?

E. . . . The box thermometer shows a far higher temperature than the other thermometers. At present the difference is 9°C.

O. This is April, and the sun is not very high. In summer, we find temperature differences up to 20 degrees. Let us call these differences *To–T*. It is that temperature above the average soil temperature which is produced by our arrangement of materials. Since the sun radiation is the same in the whole field of the experiment, the temperature difference can only be the result of the arrangement of materials.

E. . . . The sky has become overcast. The temperature difference decreases gradually . . . Now it is only 2°C.

O. Before and during a heavy rain, it

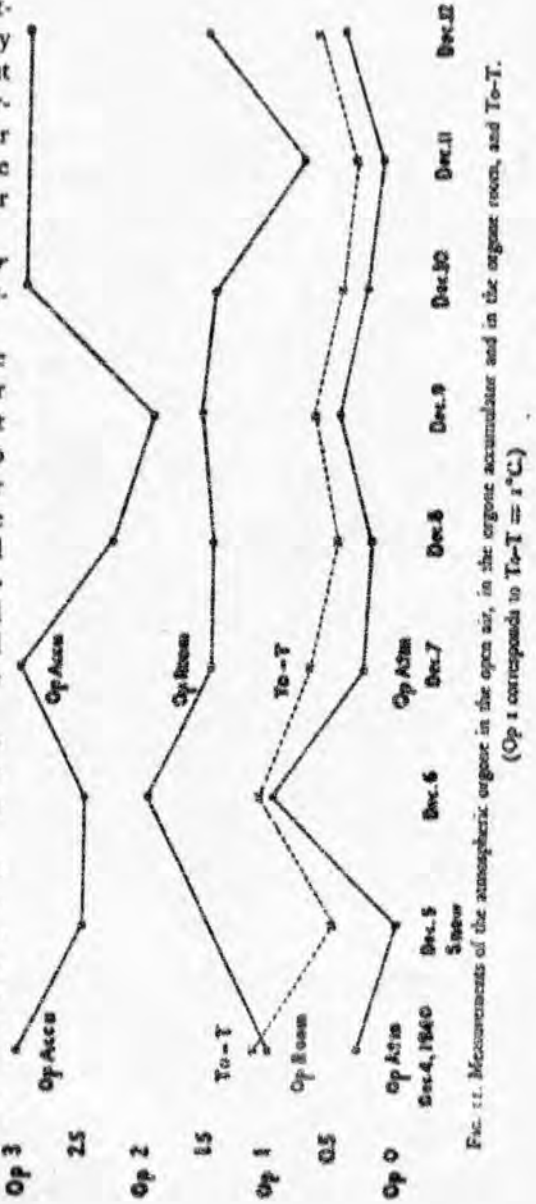


FIG. 11. Measurements of the atmospheric orgone in the open air, in the orgone accumulator and in the orgone room, and To–T.
(Op 1 corresponds to To–T = 1°C.)

decreases to very low values such as 0.1°–0.4°C. It is much smaller at night than during the day. It increases toward noon and again decreases toward sunset. In other words, we find the same daily variations as in the curve of the orgone tension. *The curve of the temperature difference runs more or less parallel to the tension curve of the atmospheric orgone.*

E. I have an objection. The control thermometers are in contact with the soil, while the orgone thermometer measures the temperature of *the air* in the soil above the apparatus. I am going to put a piece of rubber hose around the tips of the control thermometers in order to create the same condition as above the apparatus . . . *The result remains the same. The thermometer inside the orgone accumulator shows a temperature several degrees lower than the thermometer above the upper metal surface.*

O. When I told an eminent physicist about this fact he declared it to be impossible. *The temperature within the orgone accumulator is always lower than above its upper surface.* This fact is difficult to explain.

E. I am going to bury a simple wooden box in the same way as the metal apparatus . . . *The temperature above the wooden box is the same as within; it is only about 0.2°C. higher than that of the control thermometers.* In this experimental set-up, then, metal behaves quite differently from organic material. As far as I know, such a phenomenon is unknown in physics, and I certainly could not explain it.

O. Individual findings remain as unintelligible in the realm of orgone physics as in other realms of physics. For example, you could not explain the deviation of the compass needle in the electrical field without a knowledge of other electrical facts and of the corresponding theory. We have already encountered a fact which explains the temperature difference between above and below the metal surface just as it explains the disappearance of the temperature difference if we use organic material alone.

E. Oh yes, our cork piece is attracted by the orgone-charged metal sphere while the tin foil is repulsed.

O. You have established the right connection. *Organic substances attract and absorb the orgone, metallic substances reflect it.* The functions of the orgone become comprehensible not so much through individual findings as through *the connection of seemingly widely disparate facts.* One would not immediately surmise a connection between this temperature phenomenon and the phenomenon of attraction and repulsion. The temperature phenomenon and the electroscope phenomenon are in accord: metals stop the kinetic energy of the orgone. True, organic substances also stop the orgone particles, but this effect is almost completely counteracted by the absorption on the part of organic substances. *As everywhere where kinetic energy is stopped, the stopping of the kinetic energy by metallic substances expresses itself as heat.* Since heat ascends, it is clear why the temperature above the upper metal surface of the apparatus is higher than that of the inside, and why both accumulator temperatures are higher than those of the control thermometers.

E. I am going to repeat this experiment *above* the soil surface. I shall put the apparatus on the ground, measure the temperature of the enclosed space above it and compare it with the air temperature in the shade. The tip of the orgone thermometer is also in the shade.

O. If you compare with the air temperature in the sun, the fundamental result will be the same.

E. . . . The orgone thermometer in the open air above the ground shows a difference of about 10 degrees compared with the air temperature in the shade and about 8 degrees compared with the air temperature in the sun. In other words, *To–T is always positive.* This is indeed a bombshell: a constant temperature difference without an apparent constant source of heat!

O. That cannot be the case. True, there is no visible or artificial source of heat besides the sun radiation. But of course there must be a source of heat, or else we would have discovered the principle of the perpetuum mobile. *The source of heat of the temperature difference is the stopping of the orgone radiation by the metal.* We use no artificial, mechanical or chemical energy. The energy of the metal in stopping the kinetic energy of the orgone radiation is of a passive nature, consisting simply of the existence of the material resistance. The same kind of passive mechanical energy is consumed when a meteor hits the surface of the earth, resulting in light and heat. The high temperature difference at the orgone accumulator is due to the kinetic energy of the flying energy particles. What is consumed, then, is the kinetic energy of the orgone which, in being stopped, is transformed into heat. *Since, however, the available amounts of orgone are, practically speaking, infinite, the amount of energy transformed into heat is negligible,* and the observer gains the impression of heat production "out of nothing," that is, of a perpetuum mobile.

This fact always creates difficulties in the demonstration of the orgone. The observer, in seeing the temperature, always looks for a source of heat of a known nature, unless he is ready with an arbitrary interpretation. One observer, when I demonstrated the biological effect of a simple wood-metal cabinet to him, began to look for hidden wires and electrical connections because without them it seemed incomprehensible. Only time and experience will acquaint the observers with the fact that the orgone is present everywhere, that it can be concentrated in a specific manner and that in this way it develops its physical and biological effects.

E. These facts are amazing, your interpretation simple and plausible; I suppose you have not just thought it out.

O. Indeed not. It resulted from the combination of innumerable small findings in the course of years of constant and painstaking observation. All the more peculiar is the attitude of "critical" onlookers who see this or that individual finding and immediately try to do away with it with a word or a wild interpretation. An eminent physicist thought it "quite obvious" that the temperature above the metal should be higher. Why it should be "quite obvious" he failed to say.

E. You were going to tell me about an interesting experience.

O. Yes. I had been observing the temperature difference in my basement laboratory since 1939. In closed rooms, it is rarely higher than 1.5°C., apparently because the orgone radiation from the walls and from objects in the room is too strong. I presented my finding to a man who is a great authority in physics. At that time I did not yet know about the results of measuring the temperature in the open air because I had discovered the atmospheric orgone energy only a short time before. The physicist patiently listened to my story in the course of a four to five hours' conversation. The fact that the temperature above my accumulator was several degrees higher than inside he considered impossible. The difference between the box temperature and the room temperature—if true—he considered, like you, a "bombshell." He expressed the wish to observe the apparatus for some weeks. I put one on a table in his basement. The control thermometer I suspended freely in the room, at the same height. He convinced himself in my presence of the temperature difference and observed its constant existence over a period of two

weeks. He had promised me to support the orgone research if he could confirm the existence of the temperature difference. Now he had confirmed it. Then he called in an assistant. The assistant soon found "an explanation." The temperature difference, he opined, was due to "convection of heat from the room ceiling to the table top." If his interpretation had not been irrational, he would, of course, have convinced himself of its correctness or incorrectness by conscientious experimentation. All he would have had to do was to put the control thermometer at the same height with the orgone thermometer ***above*** the table top. This would have shown him that the temperature difference continued to exist and that his argument was incorrect. His chief took the trouble of taking the apparatus apart and found a temperature difference between above and below the table top. This phenomenon was well-known to me. It is explained by the stopping of the soil orgone radiation at the lower side of the table top and has nothing to do with the temperature above the apparatus. If one interrupts the convection of heat from the room ceiling and replaces the wooden table top by a metal one, thus eliminating the difference, the phenomenon To-T nevertheless continues to exist. Of these measures, the high authority in physics did not think. The simplest procedure, of course, was that of excluding all heat influences as may exist in a room and to measure *in the open air* as we just did. This excludes room ceilings as well as table tops.

E. The superficiality of this assistant is amazing. After all, that's no way of dealing with a gigantic problem. How did it come out?

O. As usual. I refuted the assistant's interpretation by the measurements in the open air, where not only the objection is eliminated but where the phenomenon is even more marked. I submitted the results of these new measurements to the physicist but never received an answer. I never quite understood this but I cannot help feeling that this man, who had understood my problems and findings very well, simply wanted to keep aloof in order not to engage himself although he must be convinced of the correctness of my findings.

E. That must have been a bad blow.

O. That it was. I had to think of the many great and small discoveries which, in less robust characters, are done away with in this manner only to be newly discovered, or, rather, to be stolen, by others. This physicist, by the way, immediately saw the radiation when he looked through the orgonoscope, but later he felt incapable of quite distinguishing his subjective eye phenomena from the radiation. The orgonotic lumination of gases such as argon was at that time as yet unknown to me.

E. That was a dangerous situation there. Your cause might easily have been smashed.

O. No, for my refutation of the objection was unequivocal. In addition, there are too many tangible and proven facts, and there are too many gaps in physics which cannot be bridged without orgone physics.

E. Do you find a connection with the so-called "radiation of black bodies"? They absorb all the colors of the spectrum, which are reflected by white bodies. The soil contains heat which might be absorbed by your apparatus.

O. In order to refute this objection, all orgone boxes are painted white on the outside, as you see.

E. The heat at your orgone accumulator, produced by the stopping of energy, would seem to explain the heat of the sun and the earth. If the orgone is that energy which results from the disintegration of matter; if, further, orgone heat results from the stopping of the kinetic energy of the orgone; then the heat of the sun could be simply explained as "orgone heat" as it results from the disintegration of matter at a temperature of about 6000 degrees.

O. Our little orgone system in the soil easily produces 10°C. of "orgone heat," that is, the difference To-T. On the basis of these facts, the sun heat is no longer a riddle. The heat produced in the inside of the earth also becomes understandable. It is assumed that the inside of the earth consists of "*incandescent* material." The heat of the interior of the earth cannot be simply combustion heat, for chemical combustion requires immense amounts of oxygen. If this oxygen were taken from the atmosphere, the available supply would soon be exhausted. In addition, it cannot be assumed that the interior of the earth is in connection with the atmospheric oxygen. The interior of the earth consists of "magma," an undefined, incandescent substance. Its existence cannot be doubted, for two reasons: First, the temperature goes up considerably toward the interior of the earth, about 1°C. for every 30 meters of depth. Second, the interior of the earth must be incandescent if the geological explanation of the origin of our planet from incandescent star material is correct. Since we must exclude chemical combustion we can only assume that the interior of the earth, too, develops orgone energy which in turn produces orgone heat. Finally, we must assume, on the basis of these facts, that what the sun sends to the earth is ***not heat, but orgone energy***, no matter how obscure the mechanism of this process is. The assumption of direct heat radiation from the sun to the earth is incompatible with the almost absolute zero temperature in the universe, anyhow.

E. This opens the question as to the relationship between orgone and light. Do your experiments provide any clues?

O. Many observations point to the existence of such connections, but I am not ready to say anything about it. The fact that light is identical with electromagnetic waves leads to another question which is as yet not answered experimentally. The motion of waves always requires a medium in which it can take place. Water waves are unthinkable without water, sound waves without air. In order to make it possible for waves to move, the medium must vibrate. As far as I know nobody has explained in what medium light rays, coming from the sun to the earth, move. The fact of the transmission of light rays, that is, of electromagnetic waves of light character, cannot be doubted. For the time being we must assume that the orgone is the medium in which the electromagnetic waves of light vibrate. This seems a justified hypothesis and not a "wild" one. The motion of the radio waves, also, is to be ascribed to the orgone.

E. In order to decide the question, one would have to know whether and how the orgone extends beyond the atmosphere of the earth, whether there is, so to speak, an *orgone bridge* from the sun to the earth. It might be much denser near the sun and the earth than in the intervening space. That would in no way exclude the possibility of its being the medium which carries the light waves. At any rate, this idea provides a basis on which the light medium might finally be comprehended.

O. Arrhenius assumes a cone which extends from the sun to the earth and beyond it into space. This cone was made responsible for the zodiac light also; it was conceived as "consisting of particles of matter." If you look through the orgonoscope, you see moving light particles. It is difficult to arrive at a clear picture. We are often forced to fill gaps in our knowledge with assumptions which later may prove erroneous. That the orgone is in motion is a definitely established fact. This motion is seen in the flickering in the sky and on objects. Certainly, the

orgone does not stay still like the water in a puddle. Furthermore, the motion seems to be of the nature of a *rhythmic* pulsation, again reminding one of the wave. In the orgonoscope, we see plainly moving light particles, and orgone heat is apparently produced by the mechanical stopping of this orgone motion. A good telescope clearly shows the wave-like motion of the atmospheric orgone at a magnification of as little as 60x.

E. I am reminded here of the body temperature of animals which, in warm-blooded animals, is usually higher than the temperature of the air. If you don't mind jumping from one special field to another: *is animal heat also orgone heat?*

O. Since the orgone is a cosmic, or rather, *the* cosmic energy, it is not surprising that our discussion should lead us often abruptly from one specialty to the other. You are right: the organism contains orgone. The orgone in the body is in constant motion which is again and again stopped at innumerable places. This is apparently the way in which animal orgone heat is produced. The problem of the production of animal heat thus finds a simple explanation. If heavy work is done, more orgone is in motion and more is stopped; consequently, more heat is *produced. The heat production in the organism follows the same laws as the production of sun heat.* It becomes understandable why life depends on the sun. Both systems function orgonotically. Both form "orgonotic systems."

E. It seems to me that the bombshell of the orgone heat did not burst until this moment.

O. The simplest is always the most amazing. It would be premature to try to comprehend the biological orgone phenomena before the foundations of experimental and theoretical orgone *physics* are established. Although the principle of orgonotic pulsation is derived from the realm of the living, nevertheless, it must be confirmed in the realm of non-living nature before it can be utilized for an understanding of life. Unless we proceed cautiously, there might well arise a few generations of mystics who conceive of the orgone metaphysically, divorced from non-living nature and who do not comprehend it from the standpoint of natural science. And it seems to me that we have more than enough mysticism as it is.

E. Right. What do you suggest for our next discussion?

O. The phenomena of orgonotic attraction in relation to magnetism.

[To be continued]

THE "LIVING PRODUCTIVE POWER, WORKING POWER" OF KARL MARX*

By WILHELM REICH, M.D.

INTRODUCTION.

This article was written in 1936, at a time when the sociological illusions in the Soviet Union were put into the form of a constitution ("Introduction of Soviet Democracy"). At that time, it was not published. If it is published now, 8 years later, it is mainly for two reasons:

1. Humanity is more in need of scientific, that is, *truthful* thinking than ever before. Armed disputes will not change its misery an iota. Even after the military victory over German fascism, the fascist human structure will continue to exist in Germany, Russia, America and everywhere else. It will continue to grow subterraneously, will seek new forms of political organization and will inevitably lead to a new catastrophe, unless the responsible people all over the world will rally to protect and utter truth as today only the political lie is protected and uttered. This can be predicted with absolute certainty.

Karl Marx discovered vital facts with far-reaching social consequences, but the realization of these consequences is not possible because knowledge and technique are not sufficiently developed to bring about a correspondingly rapid change in human emotional structure. One may welcome or condemn Marx; that is a matter of taste. What one cannot do, however, if one lays any claim to decency, is to refer to Marx and at the same time to distort his scientific facts in the interest of political manoeuvres. One cannot distort scientific truths without becoming sooner or later an accomplice of fascism, the master of distortion and lying. Even though the alteration of human conditions according to scientific findings is not possible, the misery of daily living should not lead one to smash the only hope of humanity, which lies in rational truth.

Ten years ago or so one was severely brought to task if one did not adhere to the letter of Marx's writings; one was condemned for the scientific statement that Marxist economy was in urgent need of being complemented by a scientific mass psychology. Yet recently, Marxism was "revised" in Soviet Russia. Official government economists "discovered" that Marx was wrong in contending that in socialism there would be no production and accumulation of surplus value, that, in other words, the production of surplus value was a specific characteristic of capitalism.

The distortion of the facts is the following: *Nowhere in Marx's economic theory is to be found the contention that in socialism the production of surplus value would cease to exist.* To "revise" a contention which was never made is nonsense.

The fundamental problem of Marx was not *whether or not* surplus value is produced in socialism; the problem was *the nature* of the surplus value, the question *where it comes from* and *who disposes of it.* Surplus value is produced on the basis of the specific character of *living working power.* The core of Marx's economics is the fundamental difference between living and dead productive power.

From the finding of the *nature* of living working power, and with that of the *origin* of surplus value, follows the further question who *appropriates* the surplus value. *It is always appropriated by the*

* Translated by the Editor.

owners of the social means of production: in private capitalism by the individual capitalists, in state capitalism by the state, and in a free work democracy by the society of the working individuals, as historically in primitive societies and as foreseen in a future truly democratic society.

One may welcome these findings or one may hate them, but it is not admissible to distort them. To shift the problem of the production of surplus value from the questions of its *nature, origin and appropriation* to the question of its *existence* is an inadmissible distortion of a scientific finding. The exposition which follows has nothing to do with any kind of political ideology but only and alone with the vital interest in the protection of scientific integrity. In these times, it is not superfluous to point out that such scientific problems cannot be solved by firing squads, these most modern means of settling differences.

2. The second reason for the publication of this article at this time is the connection between Marx's analysis of living working power in the production of surplus value and the orgone-physical study of human biological activity. Since about 1928, sex-economy has been aware of the fact that what Marx calls living working power is identical with what orgone biophysics calls *work function of the biological energy*. Particularly at this time, it is a matter of profound human and scientific gratification that a thinker and searcher of the stature of Marx made a specific life function the core of his "dry" economic theory. He was the first to do so, for which working humanity owes him gratitude. That humanity almost let him starve; that it continues to smear him; that it begins to impute things to him which he never said; that it appropriates his practical scientific discoveries without giving him credit; all this adds another heavy debt to an already gigantic debt account of this humanity. It is not the fault of Marx. I felt it my scientific duty to set straight what an almost incomprehensible social mentality tries to distort and obliterate.

Orgonon, July, 1944.

Karl Marx was for the science of economics what Freud was for psychiatry. His basic concept was simple and at variance with all traditional views. Pre-Marxian and non-Marxian economics tried to explain profit from the "natural value" of dead material, from the existing and invested capital, etc. The economists before Marx had contended that the value of commodities was determined by the law of supply and demand. Marx showed that this produces no more than slight price fluctuations, and that the value of a commodity is basically determined by the *human working power* invested in it. A tree, e.g., has no "value" in itself, i.e., not until human work is "added to it." Not until the tree is felled and sawed into boards or made into masts does it assume "value" for man. This applies to everything which has "value." The air has no "value"; it is obtained gratis, because it can be consumed without the addition of human working power. The hide of an ox has no value until human hands fashion it into shoes.

Marx distinguishes the constant from the variable capital. The *constant* capital consists of non-living raw materials and non-living machines. These, in themselves, give no profit; not until human work, *the variable capital,* changes them into commodities, into use values. Since money can be lent for interest, the *value* of the capital seemed to be determined by the fact that it brought in more money, be it through investment in industry (industrial capital) or through lending (bank capital). According to Marx, money is no more than a paper issued on the basis of a social agreement, for the facilitation of

trade. In itself, it has no more value than the working power which was expended in its manufacture. Its actual value it derives only from what it represents, from what it can be exchanged for, as, e.g., a commodity. However, one buys not only dead commodities, but also *living* commodities. The entrepreneur pays the worker for the use of the "commodity, working power." This working power can be sold and bought like any other commodity. When a shoemaker makes a pair of shoes and sells them, they no longer belong to him. Neither does the working power which, say, a lathe worker sells to the capital owner. Just as the buyer of the shoes can do with the *use value* of the shoes what he pleases, so can the entrepreneur do what he pleases with the *commodity, working power* which he has bought; he can exploit it as he pleases. In doing so, he is not "bad"; he acts, according to the laws of market economy, altogether legally.

The effect of the emotional plague on Marx's scientific theory of value expresses itself in the following manner: In their attempt to arouse the emotions of the masses and to win them over, the party politicians forgot about the unemotional explanation of the value of working power. They attached to the factual concept of "surplus value" an emotion composed of resentment, hatred, envy and the urge to pocket surplus value oneself. Thus the fruitful and promising objective findings of Marx got lost in a heap of irrational emotions which not only led to no practical result but brought ruin to the whole workers' movement. True, the emotional plague is able to win masses, to conquer nations, to destroy populations; but it is unable to take one single constructive measure for the improvement of economic misery. Scientific fact-finding corresponds to the biological mastery of obstacles which are in the way of unfolding life. There can be no dictatorship over the growth of trees. True, the emotional plague can shoot to pieces, burn or otherwise destroy millions of trees. But one cannot prescribe to a tree how fast and how much it should grow. On the other hand, scientific research into the laws of tree-growth can provide the means of preventing damage to trees, of improving the *conditions* under which trees grow faster and better.

This example shows clearly the biological function of natural science as contrasted with the destructive function of every kind of emotional plague: What political groups, in Europe and America, fight as "Marxism" has nothing to do with Marx's economic teachings. Similarly, the various "Marxist" parties of today have nothing in common with Marx's science.

Marx defined the concept of *capitalist* scientifically. A capitalist is not, as commonly assumed, a man who has a great deal of money, but a man who, based on the laws of market economy, can *use his money to buy and utilize the working power of others*. If I am a well-trained physician, if I develop a successful therapeutic method and have good therapeutic results, I will have many patients. They pay me for my time, i.e., for the value of my working power. In order to do my work, I must continue to re-create my working power, that is, I must have food, clothes, a house, etc. This represents a part of my working power. But this alone would not be sufficient to do my special work. It takes, in addition, a specific training which costs work and money. In addition, continuous work is needed for further training, etc. This takes instruments, etc., in which other workers, in turn, have expended their working power. The patient, then, pays for all the working power, not only my own, which is expended in my work with him; he pays with a conventional value-substitute, with "money," which enables me in turn to buy the results of the working power of

others, such as food, clothing, instruments, etc., that is, use values. As long as I work *myself* I am not a capitalist, no matter how much money I may earn. If, however, I were to employ, say, four physicians at a monthly salary of two hundred dollars and would let them treat patients for me, thus exploiting their working power for 8 hours a day, *then* I would be a capitalist. In that case, I would "exploit" the working power of *others*, that is, I would appropriate it in the form of money. By myself I could treat 8 patients a day and thus earn, say, 800 dollars in 25 working days. Four physicians, however, could earn four times as much, that is, 3200 dollars. I would have to pay the four physicians a total monthly salary of 800 dollars, but I would pocket the 3200 dollars for which they worked. Thus I would have made 2400 dollars *without having worked myself*, by the exploitation of others' working power. According to the laws of market economy, I would not be a swindler, but would act entirely within the law. Nobody could sue or reproach me.

It is Marx's great merit to have disclosed the secret of the *living* commodity, working power, its dual character, and the difference between the *exchange value* and the *use value* of the commodity, working power. A pair of shoes are not a *use* object for the one who produces them, but only an *exchange* object. If he does not want to use them himself, he may exchange them for meat, cloth or money. He will receive the approximate equivalent of the value of the working power expended in their manufacture. Working power is measured in *average* working time. The buyer, however, does not buy the shoes as exchange value, but as use value. He needs them for the *satisfaction of a need*, in this case, for the protection of his feet. He is entitled to receive, in the form of the use of the shoes, the *total* exchange value of the shoes, as paid by him in meat, cloth or money. In *dead* commodities, the exchange value and the use value are *identical*. In them, human working power is represented. It is different, however, with the only *living* commodity, the commodity, working power, for the very reason that it is a living power. Here, exchange value and use value are *not* identical. Here, the *use value is much higher than the exchange value*.

Every kind of worker, that is, one who creates use values, sells his commodity, working power, to the entrepreneur, according to the same laws of market economy as the shoemaker sells a pair of shoes. The working individual must "re-create" his working power, by eating, keeping himself dressed and housed. In order to do so he must work, say, three hours a day, if we measure the value of food, clothing and housing in terms of the average work which is necessary for the reproduction of the working power. According to the laws of market economy, these three hours represent the *exchange* value of his working power. The capitalist, then, does not cheat the worker when he pays him the exchange value of his commodity, working power, the value of three hours' daily work. For according to the laws of market economy, human working power is a saleable commodity like any other. But the buyer of the commodity, working power, say, a manufacturer, uses the working power of the worker not three hours a day—that is, in the value of the hours of work necessary to reproduce the working power—but 8 or 10 hours. That means, the worker *expends the use value* of his working power, which is *far higher* (8 hours of work) than the exchange value paid to him (3 hours). *The difference between the low exchange value (3 hours' working time) and the far higher use value (8 hours' working time) of the commodity, working power, represents the profit in market economy.* If a wealthy buyer of

working power buys the working power of thousands or tens of thousands of workers, he utilizes its use value that many times over its exchange value. For now a thousand or ten thousand workers, by adding their working power a thousand or ten thousand times, change dead material, dead capital, into commodities.

Their work is collective, but the appropriation of the commodities is individual ("capitalist"). If a shoemaker, in his own shop, produces two pairs of shoes a day he receives the exchange value of two pairs of shoes. If, by using machines, he produces ten pairs a day, he can get the exchange value of ten pairs of shoes. If, however, he works in a shoe factory, which continues to improve its machinery, he receives, in spite of increased production of use values, a wage which does not exceed the exchange value of his working power. For this is still three hours of working time. The utilization of his working power by the entrepreneur has remained about the same, but the "exploitation" has increased, for now the exchange values (use values) of the commodity which he produces has increased considerably.

The working individual does not dispose of the product of his work. He continues to sell his commodity, working power, at the market price (3 hours' working time). *Every one who lives by selling his working power is a worker. Every one who buys the exchange value of the commodity, working power, and exploits its use value,* on the virtue of the differential between the exchange value and the use value of the living working power, *is a capitalist in Marx's sense.* On the basis of Marxian principles it would be wrong to make the capitalist responsible for the exploitation of the people who create values. It is not the individual capitalist or the class of capitalists who are to be "blamed," as the narrow-minded socialist believes. The essence of the exploitation lies in the essence of a *society* which is based on market economy and which is split into economic classes. It is this society which enables individuals to acquire —in one way or another—sufficient capital to buy the working power of others and thus pocket the difference between the exchange value and the use value of working power. The economic defraudation of the working individuals lies in the capitalistic *conditions of production*, and not in human intentions.

In order to understand natural work democracy, it is indispensable to understand the following contradiction in the thinking and in the propaganda of the Marxist parties: On the one hand, they had a *purely economistic* orientation; they completely excluded from consideration the character structure of people as they are. More than that, they fought violently against the inclusion of character structure in the fight for genuine democracy. On the other hand, however, Marxist propaganda operated not with the "material" facts of biological and social existence, but essentially with secondary, neurotic drives such as hatred, envy, lust for power, etc. This statement will undoubtedly offend many Marxist party followers. It is not my intention to offend anybody, but only to point out facts which helped to bring about the catastrophe.

I would like to illustrate the difference between the attitude of Marxist party politicians on the one hand and work-democratic endeavor on the other by a simple example from medical practice. If I am presented with a neurotic child suffering from insomnia and learning difficulties, it will soon be obvious that the neurosis was produced by a wrong kind of education on the part of the neurotic mother. Now, it would be completely useless to condemn the neurotic mother moralistically or to provoke the child's hatred against the mother. My finding that the neurosis is due to the harmful

educational influence of the mother has only *one* function, that of *eliminating the child's neurosis*. This finding enables me to help. Without this knowledge, or by arousing the child's hatred, or by showing revolutionary moral indignation, I would not be able to help either the child or the mother. The neurotic mother who made her child neurotic in turn is not "bad," not a "suppressor" or an "exploiter" of infantile helplessness. She is the *tool* and, together with her child, the *victim* of an *unfortunate sex-sociological situation in society*.

The same thing applies to the "exploiting capitalist" and the "exploited wage worker." To arouse the hatred of the worker against the capitalist, to kindle envy, to excite to murder, to inveigh against the capitalists, etc., *will not in the least change the law of the market economy of private capitalism or state capitalism*. This law states: "I, the capital owner (be it state or individual) pay you, the worker, peasant, technician, scientist, etc., 30 or 50 dollars a week, in order to enable you to take care of the food, clothing and housing needs of yourself and your family, in other words, to enable you to reproduce your commodity, working power. You, in turn, sell to me your commodity, working power, for 8 hours a day, regardless of the exchange value (use value) of the commodities produced by you in these 8 hours, regardless of the fact that this exchange value may be three or five times that of what you must produce in one day to support yourself and your family." The capital owner as well as the wage earner enter their mutual relationship not of their own free will and cannot change it at their will. They are both the objects of a certain social condition which functions *independently of their wills and based on a historical development* and which governs *them both*.

Whether or not the reader will understand the development of sex-economic sociology and mass psychology depends on whether he will be able to approach Marx's analysis of the laws of market economy not ethically or moralistically, not emotionally, but factually and scientifically. It is a matter of *facts* and *laws of functioning*, not of ideals and postulates. Actual endeavors can only stem from the finding of actual facts.

One of the main reasons for the chaotic misery in which humanity finds itself again and again is that the politicians build their ideals and goals not on facts, but on mostly irrational emotional valuations. Everybody who knows my writings knows that I have always been on the side of the emotions, but *only of emotions and goals based on actual facts;* I have always fought against illusionary and irrational goals and ideals.

The finding of the law of market economy and of the peculiar contradiction inherent in the living commodity, working power (exchange value is less than use value, in contradistinction to the dead commodity where exchange value equals use value), is a scientific finding; it is neither good nor bad, it is merely *true*. It has nothing to do with ethics or morals. The capitalist who pays for the exchange value of the working power and utilizes its far higher use value does not act out of malicious intent. Personally, he may be a scoundrel or a kindly man. Usually, he does not even know the mechanism to which he owes his wealth. He is himself enmeshed in the process, he is himself subject to all the consequences of the law of market economy, such as the competition with other concerns, the course of economic crises, etc.

I am neither fighting nor defending the capitalist. I am ready to admit that, personally, I do not like the character of the typical capitalist whose whole thinking, feeling and action is concentrated on making money, in whom financial power replaces natural love, who is an artist when it comes to taking and a nit-wit when it comes to giving, who is incapable of comprehending the joy in giving. But such a personal dislike should not keep one from distinguishing the human characteristics of an individual capitalist from the laws of market economy the functionary of which he has become by heritage or his own efforts.

I may say that I consider the discovery of this law of economics one of the greatest achievements of human thinking. True, the law of market economy was discovered and exemplified by Marx in terms of the last 300 years of capitalistic machine civilization. But it reaches much farther back, to the early history when society increasingly ceased to produce use values and proceeded to produce exchange values, that is, "commodities." With that, natural economy based on the exchange of goods developed into "money economy." At the same time, sex-affirmation, which guaranteed a natural regulation of the sexual energies, turned into sex-negation and the emotional plague.[1] The discovery of Marx has changed the face of society as a whole. It has made thousands of economists and sociologists conscious of what has become modern socio-economics. There are innumerable economists and sociologists who never read Marx or even refute him but who, nevertheless, wherever they work factually, are deeply influenced by Marx's economics and sociology. It was not Ricardo or Smith but Marx who brought the laws of modern technical development into general consciousness. The many liberal and socialist organizations would never have been able to keep in step with this development had they not been — consciously or unconsciously — under the influence of Marx's sociology. I know from experience that there are many responsible capitalists who hold Marxian economics in high esteem and understand them better than ever so many socialist party politicians.

Understandably enough, Marx left serious gaps in his sociology. First of all, he lacked the knowledge of *man's biological anchoring*, of his being determined by his instincts. In the place of this knowledge, the party politicians put unscientific ethical concepts, freedom slogans and formal, bureaucratic "freedom organizations." I do not know how many economists in the Soviet Union are aware of the fact that, according to the strict definitions of Marx's theory of value, Russian economy is still governed by market economy, with its conflict between exchange value and use value of working power, with its inevitable exploitation of human working power. It makes no difference whether it is the "state" or the "capitalist" who does the exploiting. What matters is whether he determines society who *creates* the surplus value which results from the differential between exchange value and use value of working power, or he who merely makes use of it, be it "state" or "capitalist."

"State" and "society" mean two basically different social facts. There is a state which is above or against society, as best exemplified in the fascist totalitarian state. There is a society without a state, as in the primitive democratic societies. There are state organizations which work essentially in the direction of social interests, and there are others which do not. What has to be remembered is that "state" does not mean "society." In the course of 20 years, I have not heard one Soviet economist mention this fact. According to Marxian principles, there is, in the Soviet Union, no socialism, that is, *no abolition of market economy;* there is *state* capitalism, that is, capitalism without individual capitalists. One cannot, without losing all sound orientation, replace scientific insights by slogans, ideologies, illusions and theses.

[1] *Cf.* my books, DIE SEXUALITÄT IM KULTURKAMPF and DER EINBRUCH DER SEXUALMORAL.

It is not the individual capitalist or the state which is responsible but the function of market economy. Only when one fully and clearly recognizes this, can one judge the social effects of market economy on human life; can one ask oneself whether it might be possible to abolish this market economy of thousands of years' standing and to replace it by an economy of utility. A planned economy into which economy, everywhere, increasingly develops, automatically furthers the change from market economy to an economy of utility. One produces goods which one needs and not goods which one can sell for profit. To the extent to which Soviet economy was planned economy it developed an economy of utility. These facts are neither good nor bad, but actual processes. It was not party-political but scientific *sociological* work which led in directions which put sociology and economics on their feet.

I wish to emphasize the fact that the basic elements of Marx's discovery of the theory of value and, with that, of human work in general, are of a *biological and biosocial* nature. This basic fact escaped the attention of the party politicians. *It is only the living working power (the "variable capital") which creates values, and not the dead capital.*

One might ask why I am such a strict advocate of Marx's theory of value. It certainly is not because of any political orientation, nor because of poor economic conditions, but for the sole reason that there is no other sociology besides that of Marx which would be in better harmony with my own discovery of the biological energy. The natural organization of work as a biological fact (that is, not as a moral or political demand) as well as the findings of orgone biophysics demand the recognition of the fact of the "living commodity, working power" and its characteristics. Such facts become of tremendous weight and decisive influence when they are supported *from two sides, independently of each other.*

Marx's economic theory meant the same for economics as Freud's theory of unconscious psychic life meant for psychology. Both presuppose a certain conception, based on facts, of the *laws* which govern human life of today.

The production of goods in society is collective, their appropriation individual. The working individual does not dispose of the product of his work, neither in private nor in state capitalism. He is a *wage worker*, that is, he is paid for the exchange value of his commodity, working power. Socially, we have on one side the capital as social power, represented in the private or state ownership of the means of production, of the soil and of houses, and on the other side we have wage work. To this correspond the two economic classes: *capital owners* (private or state) and *wage workers*. Their interests are antithetical. It is inherent in capital that "it should pay." That, however, it does only if it bears interest. And this it can do only if the capital owner gains the "surplus value," the differential between the exchange value and the use value of working power. The worker, naturally, desires to see his wages increased. The capitalist, be it individual or state, has the equally natural desire to keep wages down or to lower them. Two classes oppose each other in a hostile manner. What causes this condition and perpetuates it by means of special institutions are the socio-economic laws of market economy.

Marx's teachings, like all great human thoughts, showed all the signs of immodest boundlessness. That this boundlessness was replaced by party-political narrow-mindedness when Marx's burning intelligence was no longer present is itself one of the problems of Marxian sociology. Marx himself early drew the line between

himself and his followers when he said, "I am not a Marxist."

I am not a Marxist either, but I seriously believe to have understood Marx, in his important greatness and his unimportant weaknesses. Let us return to his great discoveries and attitudes. He was very consistent; for this he had to pay with expatriation, abject poverty and persecution. Before Marx, the belief was prevalent that "man makes history," the leader, the genius. Marx did away thoroughly with this illusion. True enough, man makes history, who else could? Certainly not the machines. *But he can make his history only under certain conditions which govern him.* The will of people and the degree to which they attain their goals are always dependent on the development of the technical mastery of nature and society at any given time. Daedalus and Icarus had the will to fly. But they could not succeed. The knowledge and the technique were lacking to produce gasoline and to construct motors which could lift a burden into the air. True, human phantasy and activity are the source of all social endeavors. But they are themselves determined and limited by the times. Copernicus and Galileo could not take away from people the feeling of the uniqueness of the role of their earth. They were severely punished because their times were as yet unable to make anything of their discovery in a practical way. There were no astronomers and no stratosphere aviators to whom the knowledge of the earth's rotation around the sun would have been indispensable. If one values one's life it is better not to be *all too far* ahead of one's times. Only Marx can make comprehensible to us the fact that he was not recognized during his lifetime and why his movement, 50 years after his death, suffered a deadly defeat at the hands of idiocy. Without Marx, we cannot understand Marx, or Marxism, or extreme metaphysics, fascism.

Every working individual is interested in the improvement of life. If, as the metaphysicists contend, man made his history by his "free will," we would have had paradise on earth long since. The fact that we do not have it, that, on the contrary, human society is threatened with destruction, shows the correctness of scientific sociology: *People have, without being aware of it, created conditions and relationships which now govern them.* They built machines in order to produce more efficiently. The machines kill them and make them starve. They discovered the movies. Innumerable actors became destitute. The more wheat and coffee is harvested the more of it is burned up or dumped into the sea, the less do the millions have to eat. This is an idiocy which certainly deserves intensive scientific scrutiny. Capitalist economy is a *profit* economy. It does not produce goods for use but for sale. The economic system does not serve the gratification of needs; rather, the needs are created, suppressed or displaced according to the laws of profit economy. World economy does not ask how many Chinese or Negroes go barefoot. But it holds annual conventions to determine this or that small change in ladies' and gentlemen's shoes in order to propagate a new "shoe fashion" as a vital necessity. The movie industry does not ask what human, pedagogical, medical or technical problems could be treated in the films. Instead, it provokes perverse and sadistic feelings in the people, in the interest of the box office. There are hardly any films at all which really solve any human problem. Most of them do not even present vital problems, and the majority provoke pathological longings. The film does not serve the people but the profit interests.

Profit economy lives by eliminating the competitor. Competition, called free enterprise, destroys small enterprises and gathers the large ones into ever more powerful concerns and trusts. "Capital becomes con-

centrated in a few hands." Pauperization keeps growing. The shoe manufacturing concerns ruin the shoemaker, the agricultural machines the farmer. The big capitalist ruins the small one, after he in turn has ruined the craftsman. The free craftsmen of yore changed into an army of employed technical specialists or largely unskilled laborers.

The rationalization of economy, instead of reducing working time, created unemployment. If business was good, if the demand was high, one kept producing more and more. The capitalists the world over do the same thing, in order to make more money, in order not to be left behind. Then the demand decreases. The capitalists have huge stocks of which they cannot dispose. The economic crisis begins, and with it a dreadful vicious circle. The entrepreneurs dismiss workers. This decreases the purchasing power of the population. Banks fail because of failing trade. This ruins the small fortunes which again reduces purchasing power. The reduced purchasing power of the population increases the stagnation of distribution. This leads to new dismissals of workers, and so on. Wages are lowered. Working time, if possible, is increased *without* increase in wages, or decreased *with* decrease in wages. Neither the entrepreneur nor the worker really comprehends what is going on. This was the effect of *objective* conditions of production around 1930.

Society is not simply a sum of individuals who live and work side by side. Social life is determined by the over-all effect of all forces in and between people. The determining factors are the *mutual "social" interdependencies*. Sociology is the teaching of these interpersonal relationships. The "well-ordered legal state" is an illusion, not a reality. It is an illusion just like the "harmony of the perfect personality" in the old ethical psychology. Since people know only the smallest fraction of their interrelations, they also are unable to govern or alter them. For this reason, the interpersonal relationships take on the character of an inexorable fate. The average individual considers his social position such a fate. Those who see through the maze of the social dependencies and the mechanism of exploitation become "class-conscious," the capital owner as well as the owner of working power, the wage worker. Then, the former can exploit all the better, the latter can fight more successfully against exploitation. This was the theory of the Marxist parties.

This conflict remains unsolvable within the capitalist order. Either the working producers possess the means of production, or the capital owners do. That both should do so at the same time is inconceivable. The will to exploit others' working power cannot be united with the will not to let oneself be exploited. Any such union would take place at the expense of the consciousness of the process of exploitation. Capital and labor can get along "peacefully" with each other only if the exploitation is kept from the consciousness of the exploited. He who fights against this is a "Communist agitator." Marx was the greatest "Communist agitator" for nobody else has more clearly demonstrated the nature of the creation of values out of the "commodity, working power."

The practical consequence of Marx's theory of value is the appropriation of the use values by *all* working individuals, that is, the *social appropriation of the products*. I repeat: the *social* appropriation, not appropriation by the "state" or private monopolies. The socialist politicians confused social appropriation and appropriation by the state, greatly to the detriment of the clarification of socio-economic questions. While social development as a whole, as a result of the war, is more and more in the direction against private monopoly *as well as* state monopoly, the socialist parties still wish to replace private monopoly by state monopoly. This follows logically

from their equating state and society. Genuine democratic endeavor, however, is in the direction of eliminating private as well as state monopoly. The "labor management committees" in the U.S.A. represent a beginning of a work-democratic form of social appropriation; here, part of the social responsibility is shifted to *work* itself. What is meant here is the participation of the industrial workers in the management of production and distribution, in contrast to a representation of their interests by party or trade union in which the workers themselves remain *passive*.

Work democracy is based essentially on two facts:

1. A worker is every one who does socially necessary work, that is, not only the manual worker.

2. Social responsibility rests with the society of the workers and not with private individuals or individual state functionaries.

The question which, peculiarly enough, neither socialist nor any other "freedom parties" ask themselves, is the following: *Are the millions of working individuals willing and able to take their responsibility for the social process?*

Marx himself did not ask the question *what would be the attitude of the suppressed and exploited themselves toward the disclosure of the process of exploitation and suppression*. The Marxists did not doubt that the exploited would joyfully accept the "gospel of liberation." From the point of view of rationalism, this was entirely correct. Unfortunately, human thought and action is determined not only rationally. There is also *irrational* thinking and acting. This is a fact which Freud had demonstrated. Nobody had an inkling then that this fact would one day confront the workers' movement as a central and crucial problem. Marx and Freud formed two enemy camps fighting each other for the recognition of their respective interpretation of social living. This was the starting point of my attempt to unite the two theories, an attempt which, logically, failed.

Marx's sociology demonstrated the economic processes which determine the interpersonal, that is, social, relationships. Freud's psychology, on the other hand, demonstrated the unconscious, that is, in the last analysis, *biological* forces which govern human thought and action. Thus we had, side by side, or, rather, opposed to each other, a scientific *sociological* and a scientific *psychological* interpretation of human existence.

"Objective socio-economic conditions and processes, independent of conscious human will, determine your thinking and existence," is what Karl Marx found.

"Psychic instinctual forces which are independent of conscious human will and which are, in the last analysis, rooted in as yet unknown biological sources of energy, determine your thinking and existence," is what Sigmund Freud found.

The socio-economic conditions, Marx's "productive forces," are at work *outside of* the human biopsychic organisms, or *between* them: technical development, labor conditions, family conditions, ideologies, organizations, etc. Freud's psychic instinctual forces, however, are at work *inside* the biopsychic organisms. They are as inaccessible to conscious control as are the socio-economic productive forces of Marx.

These two scientific interpretations of human existence seemed to be contradictory and mutually exclusive. Accordingly, the schools of sociology and psychoanalysis were engaged in a bitter feud. The Marxist socio-economists who had a fundamental influence on the public life of Germany and Austria viewed psychoanalysis as a dangerous and undesirable competitor in the interpretation of social and individual existence, just as the psychoanalysts considered Marxism as such.

Yet, the two schools had a common

meeting ground: both of them looked for and described the *objective* process which, hidden from human consciousness, is at work behind the superficial phenomena of ideology, of valuation, of ethical concepts and social demands. In so doing, they both proceeded truly scientifically, like physics which seeks to find the *law* of kinetics behind the phenomenon of motion or the functional laws of the invisible electrical energy behind the spark of a battery. Both did away with the psychologisms and ethicisms of economics and psychology which did not go below the surface phenomena.

It was a gigantic achievement of human thought to progress from empty demands and moral evaluations which had no basis in fact, no matter how well-meant they may have been, to the *nature* of factual processes. Only from such facts, and not from empty demands, could a non-utopian, realistic practice for the improvement of individual and social existence develop.

The economists, philosophers and psychologists of Marx's times continued to adhere to the metaphysical concept of man's "free will." They were unable to let go of this concept because it meant an illusory consolation in the existing chaos. We know that illusions always have a greater attraction than tangible truths. The illusion of a free will and of a supernatural determination of man, of a Providence and a fatefulness of life, fulfills two irrational functions: For one, it makes man forget his helplessness in the face of nature, including his own drives, and drowns out his feeling of impotence and his fear of living, by giving him a feeling of being like God. This function found its extreme expression in the fascist emotional plague. As we know today, but did not know in 1928, it was the result of the irrationalism in the masses of people, and not the achievement of one man, a man who had completely failed in any rational work.

The second function of the concept of free determination has a rational, though always misleading, core. This is the function of giving people the courage to fight for their existence even where they feel helpless, small and impotent, where they lack the knowledge of the processes they are dealing with. Man has to exist in any case, with or without knowledge. For that he needs the emotion of illusion. Illusions, then, are not just irrational formations; seen from the emotional point of view, they are also power-giving attitudes. Hence the simile of "the faith that moves mountains." The success of Hitlerist mysticism has clearly demonstrated the fact that mysticism, based on emotions as it is, has a much more powerful social effect than scientific knowledge.

Illusion, then, has to be recognized as justified and necessary, but only where man has not progressed to actual knowledge. If we were to condemn illusion as such in an absolute and mechanistic manner, we would be apt to be intolerant toward such achievements as are based on illusions. The actual achievement of the Soviet Union in creating a better economy and in eliminating the crassest social injustices was based on the illusion that one was "developing socialism." The illusion of mechanistic natural science that, in fighting religion and mysticism, it was discovering the "nature of the soul" led to great achievements in the fields of physiology and colloid chemistry.

Nevertheless, the dangers and the harmfulness of illusions are far greater than their usefulness. What achievements spring from them cannot stand comparison with practical achievements springing from actual knowledge concerning facts and processes. Again and again, illusionary Weltanschauungen nullify the rational striving of man to reduce the realm of the unknown and to widen the field of knowledge. Illusions again and again lead to reactionary, regressive social institutions.

This is shown in the regressive development of the Soviet Union as well as in the inhibition which mechanistic concepts in natural science exert on the growth of knowledge of the living function. Thus, if I point out the rational function of the illusion, this does not mean that the *scientific* struggle for the expansion of human knowledge should be relaxed. If I cannot use my leg I will use a crutch in order to walk as best I can. Just the same, I shall throw away the crutch as soon as I regain the natural motility of my leg.

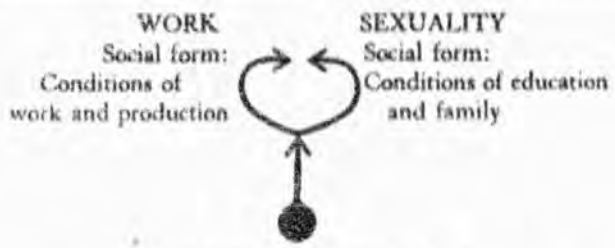
Because of the bolstering of their egos which the metaphysicists and mystics of every kind obtained from their illusions, they have continued to take a violent stand against Marxism and Freudism. Yet, their cries, "I am so free, so superior, so God-like, master of myself and of nature," such cries have not changed in the least their dependence on psychic irrationalism on the one hand and on the chaotic socio-economic processes on the other. Indeed, the world catastrophe of the past decade has demonstrated this tragic dependence in an unmistakable manner.

The sciences of Marx and of Freud were indispensable prerequisites for a mastery of these two kinds of human dependency. They had a common meeting ground also in the fact that Marx as well as Freud built his science on as yet undiscovered bio-social and biological laws:

Marx's whole socio-economic concept rests on the *living* nature of human work. *Work is a basic biological activity*, characteristic of even primitive organisms. Man, in his work functions, is not distinguished from other animals by the fact that he works; that, all living beings do, or they could not exist. What distinguishes him is only the fact that he tried to improve his work functions by the *invention of tools*. Marx has shown us that man, in this social differentiation from other animals, came to grief in that he became the slave of the tools which he had created. To judge from their publications, the fact has escaped the Marxists that it is the difference between the use value and the exchange value of the *living* working power which for thousands of years has determined the social mechanisms of patriarchal civilization. In his philosophical writings, Marx continually stressed the fact that, in the last analysis, man with his *biological* organization is the *"prerequisite* of all history." Of the concrete nature of this "biological organization," of course, Marx knew nothing, for biology did not know anything about it either; and the specific biological energy, the cosmic orgone, was not discovered until the years between 1936 and 1939.

The two basic objective biological functions of the living, then, *"work"* on the one hand, *"sexuality"* or *"pleasure function"* on the other, were treated, apart from each other, in two separate scientific systems, Marx's sociology on the one hand, and Freud's psychology on the other. In Marx's system, the sexual process led a Cinderella existence under the misnomer, "development of the family." The work process, on the other hand, suffered the same fate in Freud's psychology under such misnomers as "sublimation," "hunger instinct," or "ego instincts." Far from being basically antithetical, the two scientific systems, their originators being altogether unaware of it, met in the biological basis of living matter, in the *biological energy of all living organisms* which, according to our functional method of thinking, expresses itself in *work* on the one hand and *sexuality* on the other.

The clarification of this functional character of biological energy, its simultaneous identity and antithesis, remained the task of sex-economic research. Of that I had, of course, no inkling at the time, when, between 1928 and 1930, I made the first attempts to introduce psychological methods into sociological thinking. My attempts of that time to solve the conflict



Law of biological energy of living matter.

between the two scientific systems forced me, with the logic of fact-finding, on the path which finally led to the discovery of the orgone, the cosmic life energy. I doubt that I would ever have succeeded in discovering the orgone had I not for years, in the hard struggle of everyday work, applied sociological criticism to Freud's psychology and had I not demonstrated the gap in Marx's socio-economy and bridged it with the concept of "character structure."

The laws of biological energy, of the orgone, comprise the basic mechanisms of work as well as of sexuality, and, with that, the emotional forces *within, without and between* people. These laws are the basis of rational human strivings as well as of irrational strivings, of scientific search as well as of the mystical belief in the existence of an unknown Almighty.

The basic biological mechanisms of the living are not a mechanical summation of work functions plus sexual functions. Rather, they constitute a *third* factor which is at one and the same time *identical* and *different* as well as something *deeper*. Sex-economy and orgone biophysics, then, are not a summation of Marxian and Freudian concepts. They are new disciplines based on sociological as well as depth-psychological findings, the *incompatibility* of which led to the discovery of the third factor which they have in common.

THE STUMBLING BLOCK IN MEDICINE AND PSYCHIATRY

By Theodore P. Wolfe, M.D.

In medical and psychiatric literature, one finds a great many peculiar statements which become understandable only if one realizes that they are based on the ignorance of *the basic role of the sexual function*. The unwillingness or inability to recognize this basic role of sexuality and its far-reaching consequences in psychiatry, medicine and sociology lead to a number of typical fallacies. In the case of many of these, their function is obvious: that of diverting attention from such simple facts as that the neuroses are due to a disturbed genital function. Thus, while this fact is obvious to any half-way healthy layman, the scientist asserts—without proof—that the seat of the neurosis is the thalamus or a "weakened central nervous system," or that the most important cause of psychoses and neuroses is "heredity." It is easier to blame heredity than a society which insists on the suppression of healthy infantile and adolescent sexuality. The fact is being more and more realized that a disturbance in the autonomic system plays an outstanding role in the neuroses and many so-called physical diseases. Yet, unless one also realizes the fundamental role played by the sexual function in the maintenance as well as the disturbance of the vegetative equilibrium, one gets lost in the maze of autonomic phenomena and arrives at misinterpretations such as regarding a disturbance in one or the other endocrine gland as the causative factor while, in fact, it represents only one aspect of a total vegetative disturbance. This leads to a mechanistic "organ-mindedness" which makes one overlook the total function and makes one equate, for example, the sexual function with the function of the gonads. This, in turn, leads to such erroneous therapeutic assumptions as that endocrine treatment with sex glands is a causal therapy for sexual disturbances. The ignorance of the total function leads to what has been called "psychologizing biology," to such statements as "the cancer of the uterus expresses the wish for a child" or "the over-activity of the thyroid gland is due to a craving for maternal protection," etc.

These and other fallacies in medical and psychiatric thinking are discussed here on the basis of a book by an English physician[1] who makes a vigorous attempt to get away from the medicine of the "test-tube doctors," that is, a mechanistic, unalive medicine. The discussion will show that the reason for the essential failure of this task lies in the non-recognition of the fundamental role of the sexual function.

The book is in four sections. "The first deals with personality in relation to disease. This is necessary because it is our personality and not any individual organ or tissue which interprets and sustains environmental stresses." So far so good. Valid as this statement is in a general way, it holds only if it is backed up by concrete concepts and findings with regard to such things as "personality" and "environmental stress." But in Chapter One, Disease and Personality, we read the following:

> We are told that duodenal symptoms are preceded by prolonged or intense anxiety. This is not always so. The pre-

[1] Arthur Guirdham: Disease and the Social System. London: George Allen & Unwin, Ltd., 1942. P. 259.

ceding conditions are such as give reasonable ground for anxiety. This is by no means the same. One person responds by conscious worry. He develops a neurosis. The other produces a pyloric ulcer.

There can be no doubt that an ulcer is preceded by prolonged anxiety. So is every neurosis or neurotic symptom. When a person "responds by conscious worry," he already has a neurosis. The confusion here comes from the fact that the author does not have a concept of anxiety based on natural science. Anxiety is a state of sympatheticotonia based on the damming-up of energy. This may lead to ulcer, the sympatheticotonic dysfunction of the gastric mucosa rather fully explaining the pathogenesis. Or it may lead to a functional cardiac disorder, or to a psychoneurosis. Why the outcome is one in this case and another in another case we generally do not know. But then we should say so instead of resorting to spurious interpretations. "But there is an entirely different kind of duodenal case," continues the author. "In this the innate excessive drive of the individual induces the symptoms. His engines are too highly geared . . . Pituitary activity is partly responsible." This recourse to "innate," "constitutional," "hereditary," "God-given" factors, as it were, vitiates the whole book. There is no such thing as an "innate excessive drive"; there are only instinctual energies which do not find a normal discharge and therefore seek discharge through abnormal channels. The "excessiveness" of the drive, then, is not "innate" but the result of its being dammed up. "I know well," the author continues, "that in such cases the psychoanalytic argument is that the excessive drive is compensatory, that it is induced by an inferiority feeling which the individual attempts to overcome by excessive achievement. But this does not explain all these cases. There are many without signs of inferiority complex." The author overlooks that in this case, the "compensatory excessive drive" is a form of *psychic behavior*. Of course, it does not explain all these cases. In fact, it does not explain any of them. For an inferiority complex, operating, as it does, in a superficial psychic layer, has nothing whatsoever to do with the ulcer. That "pituitary activity is partly responsible" is also an unwarranted assumption. No doubt, a pituitary disturbance may be found. If so, this is itself one of the *symptoms* of a disturbed vegetative equilibrium but is no more the *cause* of the ulcer than is the color of the hair.

> In duodenal cases the question of lasting relief depends on the patient's subtype. If his symptoms are associated with adolescent impressions, or conflict, we can do a lot. In the presence of innate defects of temperament the symptoms persist. We cannot as yet cope with those flaws in the personality which induce in each their coincident disease.

It is hard to see how symptoms could be "associated with adolescent impressions, or conflict." What is affected by adolescent —and infantile—sexual conflicts is the total biological function; it is altered in the direction of chronic sympatheticotonia. The kind of symptoms which arise on this soil of a disturbed vegetative equilibrium is largely accidental. From a therapeutic point of view, it makes little difference what they are because they themselves cannot be treated, except perhaps by a symptomatic drug therapy. If, on the other hand, one works at the biological basis of the symptoms, if one eliminates the stasis of sexual energy and with that the chronic tendency of the organism to act and react sympatheticotonically, it matters not whether this total way of reacting gave rise to tachycardia, to a diarrhea, or to ulcer symptoms. The therapeutic result, then, depends not on the patient's "type" or "sub-type" but on whether or not therapy reaches the basic mechanism of the disturbance.

What, one may ask, are "innate defects of temperament"? Such terms belong in treatises on moral philosophy and not in books on medical subjects. Such a point of view leads inevitably to statements as the following: "We cannot as yet cope with those flaws in the personality which induce in each their coincident disease." This statement is correct if we consider character traits as "defects of temperament" and "flaws in the personality"; if, furthermore, we think of specific character traits as inducing specific organic diseases, for which assumption there is no scientific proof. If, however, one has a concept of character based on natural science instead of on psychology or ethics; if one knows the character to be nothing static, God-given, hereditary, congenital, etc., but the typical way of biopsychic reacting as it results from definite and demonstrable causes, then one is indeed able to "deal with these flaws in the personality." The technique which enables one to do so is Reich's character-analytic vegetotherapy.

The author proposes to derive from diseases such as "peptic ulceration, hyperthyroidism, diabetes, rheumatism, arteriosclerosis, chronic nephritis, etc.," a concept of "vulnerable personalities." "All have a strong hereditary factor." It may be said that if one is going to develop any new concept in pathology, one first has to free oneself of such fallacious concepts as the alibi of "heredity." These diseases, the author says, are "the destiny of foredoomed psyches." ***If that is so, why write a book on "Disease and the Social System"?*** These diseases, the author continues, "are the somatic protests of defeated psyches." No, they are the ***socially*** conditioned defeat of a biological organism. They are not, as the author states, a matter of "neuropathy," of a "more vulnerable nervous system." It is really high time for this kind of brain mythology to disappear from medical literature.

Chapter Two is called THE EMOTIONAL CAUSES OF PHYSICAL DISEASE, in which the author "deals further with diseases associated with different personality types." He refers to "chronic constitutional diseases," like peptic ulcer, arteriosclerosis, thyrotoxicosis, etc., as "strain diseases." These are "characterized by chemical and hormonal changes similar to those induced by anxiety, by endocrine dysfunction and by vegetative imbalance." The author then raises the question whether we "can go a step further and say that in these diseases the chemical and hormonal changes are, to a considerable extent, attributable to fear in its modern dress of chronic anxiety?" He then enumerates various observations concerning physiological changes accompanying anxiety, but all these are invalidated a page or two later: "What is the factor in the personality which causes ***physical*** diseases in response to strain? I have indicated that the endocrine system is the vulnerable focus. I believe the nature of the disease exhibited is determined by innate impoverishment of vitality in particular glands." So, again, we return to "innate" factors in this or that organ, after a seeming attempt to get at factors in the "personality" and the "emotions." Thus, instead of getting away from the brain mythology of the 19th century, the author arrives at a concept of a "wider neuropathic diathesis," and states that "the central nervous system is peculiarly vulnerable and of impoverished vitality in Western man." Apart from vague references to "fear, anxiety and strain," this chapter on "Emotional causes of physical disease" contains nothing on emotional causes of physical disease.

In Chapter Three, PHYSIQUE AND DISEASE, the author mentions first the study of the connection between physique and psychological disorder as exemplified by Kretschmer, the asthenic habitus in tuberculosis and duodenal ulcer, and then proceeds to study "a reverse phenomenon,

the effect of disease in altering posture." He refers especially to the role of chronic anxiety and depression in emphysema. Here, we find a number of correct and important clinical observations with which the vegetotherapist is very familiar.

> In addition to the relatively inexpansible chest, with rigid muscles, the patient's head is thrust stiffly forward in an attitude of anxious watchfulness. The neck, too, is held stiffly. The sternomastoid is harshly outlined. Its anterior margin is sharply defined. The trapezius is also abnormally tense. . . . How do we explain these peculiarities of configuration? The position of the head and neck is natural in states of tension. The shape of the chest is due to prolonged fixation of the chest muscles. In these cases it is a kind of physiological habit due to anxiety. It is an axiom that anxiety causes some of us to hold their breath. . . . Respiration, arrested by anxiety, is most commonly halted in partial expiration.
>
> This theory is not far-fetched. I doubt its acceptance. It is founded on primitive and commonplace observance. It can therefore anticipate no kindlier salutation than the cold eye and the curled lip of the test-tube doctor. I offer a few more facts, with proper fatalism, from a sense of duty. Not many people breathe properly. An even smaller number of neurotics have mastered this simple exercise. Anxiety cases breathe notoriously badly. They are incapable of the full deep movements of expiration. . . .

The author then poses the question: "Are anxiety and a tendency to emphysema concomitant traits of a particular personality type? Alternatively, does the anxiety induce the posture? I cannot be certain."

Character-analytic vegetotherapy answers this question. The chronic inspiratory attitude of the chest and anxiety are neither independent concomitant phenomena, nor does anxiety "cause" this attitude. Rather, the chronic inspiratory attitude is identical with anxiety. They are typical of the neurotic character, no matter what its type. It is the attitude of the individual incapable of giving himself, and it does not fully disappear until a patient has lost his fear of surrendering to the flow of his vegetative sensations, in other words, until he has lost his orgasm anxiety and has attained orgastic potency.

Chapter Four deals with Disease and Posture. "Postural defects are often a bridge between anxious reactions and physical illness. The organic condition may be ushered in first by a period of functional disturbance. In several diseases we can trace four stages in development—strain and anxiety, postural defect, functional illness and organic disease." It may be pointed out at the outset that the author deals only with one, although a very important aspect of posture, that of lumbar lordosis. He points out that there are certain bony conditions in which posture obviously contributes to disease, such as spondylitis and arthritis. "There is a prodromal stage of increased tension in the lumbar muscles. Muscular rigidity expresses psychological tension." While this is undoubtedly correct, one would doubt the accuracy of such specific statements as that "the poker spine [in spondylitis] expresses the poker face." Equally unwarranted is the assumption of the association of several varieties of dyspepsia and constipation with postural "causes." Undoubtedly, they do occur together very frequently, but these visceral disturbances are, as will be shown, not "caused" by the faulty posture.

The author himself is well aware of the problem, which he states as follows:

> It is very difficult to say whether postural deformity and abnormalities of visceral function are coequal signs of a vulnerable psyche or whether the former precedes the latter. The question can be answered in two ways, firstly by a study of the response to relaxation and correction of the postural deformity; secondly, and perhaps more naturally, by a study of postural defects in children.

The author reaches the conclusion that "it is impossible, from the study of the effects of relaxation, to say whether postural defect predates visceral and also anxiety symptoms." However, he is unaware of the reason for this failure. The reason lies in the concept and practice of a *mechanical* relaxation therapy which, by mechanical manipulation, releases tensions without asking what it is that *causes* the tension. Here is an interesting observation from this relaxation therapy: "Some of these patients find it extremely difficult to pass from the superficial to the deep phase of relaxation. *They experience a growing tension, an insupportable restlessness, and symptoms referable to the epigastrium.* [Italics are mine.—T.P.W.] The latter, at first vague and poorly defined, are found later to include heartburn and the feelings of emptiness encountered in hypertonic stomach." In other words, when relaxation reaches a certain degree, these patients develop symptoms of anxiety! This is why they hold on to their tension; because letting go of the tension means releasing energy which was bound up in the muscle tension and which will manifest itself as anxiety. This is an everyday experience in vegetotherapy and was described by Reich in the early days of this therapy. It is obvious, then, that the "postural defects," that is, the muscular tensions, do not "predate" the anxiety symptoms; on the contrary, they were developed as a defense against anxiety. About the question whether the "postural defect" predates the visceral symptoms, more later.

The author, unaware of this connection because of his mechanical concept of relaxation, then proceeds to look for the answer to his question in the postural defect in children. "Defects of posture," he writes,

> are among the very first concrete signs of anxiety and exhaustion in children. They can be observed at the age of five. Lumbar lordosis is the commonest defect. . . . Enuresis is the condition, *par excellence*, where the coexistence of bad posture is most striking. . . . I cannot explain why abnormal posture should induce, say, deficient bladder control. . . . The three conditions I have mentioned—asthma, enuresis and spastic constipation—have this significant common factor—they are all associated with imbalance of the autonomic nervous system. . . . It may be that the autonomic system is peculiarly vulnerable to the adverse mechanics of faulty posture. . . . There is no specific psychological problem in the environment and no pathognomonic psychological trait in the child associated with any of these physical diseases. . . . Both postural defect and physical disease predate considerably the appearance of any conscious anxiety. . . . How does one treat conditions like asthma and enuresis in young children? To a large extent by a technique common to all. Rest is the sheet-anchor. . . . The children are also taught muscular relaxation. Their posture is corrected. An attempt should be made to correct adverse psychological factors. . . .

Here are a number of important observations which it is impossible to understand without sex-economic knowledge. From a purely clinical point of view, it is noteworthy that the author finds lumbar lordosis a common *defect* in children (he finds it in over 85% of children with enuresis). The recognition of this condition is so important because lumbar lordosis, in children as well as in adults, is usually considered "normal." This misinterpretation is, of course, partly due to its almost universal occurrence and the fact that what is common, average, is considered "normal." Another, more eas-

ily overlooked reason for this misinterpretation is the specific etiology of the lordosis, a question which our author does not even bring up. He is content with calling it "bad posture." With that, however, it is easily relegated to the realm of corrective gymnastics or simple exhortation. In reality, it is a most important medical subject. The reason why its etiology is commonly unknown is that it has something to do with sexuality. As a result, physicians arrive at all kinds of erroneous explanations on which they then base equally erroneous therapeutic procedures (such as "sacro-iliac fusion"). Why can this pathological lumbar lordosis "be observed at the age of five," as the author states? Sex-economic investigation has given the incontrovertible answer which is confirmed in everyday vegetotherapeutic practice (*cf.*, for example, Wilhelm Reich: The Function of the Orgasm, 1942, pp. 303ff: The mobilization of the "dead pelvis"). It is at the age of five that most children, under the pressure of a sex-negative, threatening and punishing environment, see themselves compelled to repress their genital sensations which induce them to masturbate. One of the basic mechanisms in bringing about this repression of genital sensations is that of *retracting the pelvis*, an action which, of course, results in a lumbar lordosis. It is not difficult to see why this lordosis should be so often found together with enuresis. It is not because, as the author suggests, abnormal posture "induces" deficient bladder control; nor is it because "the autonomic system is peculiarly vulnerable to the adverse mechanics of faulty posture." It is not a matter of the effect of "faulty posture" on the "autonomic system"; as we have seen, the "faulty posture" is itself a reaction to autonomic processes, that is, to vegetative sensations which have to be repressed for fear of punishment. The danger of such confusion is lessened if one no longer speaks of "faulty posture" but of retraction of the pelvis which serves a definite defensive function. "The deformity is sometimes excessive," writes our author, "as though the child were artificially maintaining his abnormal position." That is indeed what the child is doing; if he did not, the genital sensations of which he is afraid would again occur. Now, this retraction of the pelvis is not an isolated phenomenon resulting only in the mechanical defect of lumbar lordosis. It is only *one* of the means of repressing genital sensations, and is always accompanied by others. One of these is the pulling up and tensing of *the pelvic floor;* this contraction must of necessity interfere with the functions of micturition and defecation. This is, then, what explains urinary disturbances such as enuresis. The psychoanalyst might object at this point and say that enuresis has been shown to be of "psychogenic" origin while the urologist will maintain that it is due to this or that—usually slight—anatomical abnormality. Our author states that "the psychological factor in enuresis has long attracted attention. The more obvious association of appalling posture has passed without comment." To the psychoanalyst one would have to say that there are, undoubtedly, "psychic," i.e., experiential factors at work but that, on the other hand, such a disturbance as enuresis would not be possible without a physiological factor such as the contraction of the pelvic floor. To the urologist one would have to say that such anatomical deviations as may be found are usually within the limits of the normal and play no etiological role; or, if they do, it is only because of the superimposed functional disturbance, the contraction of the pelvic floor. To the author one would have to say that what he calls the "association of appalling posture" has a well-founded reason, as explained above.

"There is no specific psychological problem in the environment and no pathognomonic psychological trait in the child associated with any of these physical diseases [asthma, enuresis and spastic constipation]", says the author. Anyone with any experience in treating neuroses will disagree with this statement. There is one environmental problem that is *common* to all of them: brutal, premature training to excremental cleanliness, and the prohibition of infantile masturbation. To find the existence of such well-known environmental, i.e., social, factors explicitly denied in a book on "Disease and the Social System" is almost fantastic. Whether one or the other "physical disease" or neurosis will develop from this common ground depends on individual factors in the developmental history. "Both postural defect and physical disease predate considerably the appearance of any conscious anxiety," continues the author. In reality, the opposite is true: they develop as a result of the anxiety, in an attempt to immobilize the energy which creates anxiety. The author's statement is based on the fact that for this very reason, by the time he sees the "postural defect and physical disease," the anxiety is ***no longer*** present consciously. In its stead, there is a chest in inspiratory position, a retracted pelvis, a contracted pelvic floor, etc. Nevertheless, his statement is true, in this sense: anxiety may ***again*** make its appearance later on; this shows that the defenses have proven insufficient to hold down the energy. Then, the cycle may repeat itself: new defensive mechanisms are brought into play, and anxiety may recur again at a later time (e.g., at puberty) when these new defenses prove insufficient.

If the technique of treating conditions like asthma and enuresis in young children is largely "one common to all," the therapist should be aware of what is common in their etiology, namely, the repression of normal vegetative functioning. "Muscular relaxation" by itself will not correct this; it may, as pointed out above, result in the mobilization of anxiety and thus necessitate new defensive measures on the part of the patient. Similarly, the "correction of posture" is a rational procedure only if the therapist is aware of the fact that he is not dealing just with "poor posture" but with a defense attitude; to take away this defense without eliminating the underlying anxiety which causes it may be worse than no therapy at all.

Chapter Five deals with Sex Malfunction and Physical Disease. The author starts out from the "axiom that anxiety arises from interference with the operation of primary instincts. The sex instinct is most liable to frustration in our social system." He finds that

> in rheumatic conditions, particularly in women, sex frustration plays a large part. This applies particularly in the case of fibrositis and the periarticular forms of rheumatism (rheumatoid arthritis). I know of one rheumatic specialist who invariably asked his female patients how often they had intercourse, and how satisfactorily. The part played by sex frustration in inducing rheumatism is not difficult to follow. Interference with the sex instinct is probably, perhaps almost entirely, the commonest cause of anxiety. Chronic anxiety increases muscular tension. . . . Satisfactory coitus is one of the most efficient mechanisms for relaxing muscles. . . . Denied this antidote to muscular tension the female patient, where other predisposing factors are present, is liable to attacks of rheumatism.

The author then enumerates some of the conditions which lead to rheumatism, such as sexual stimulation with only partial satisfaction, impotence of the husband, long engagement, etc., in other words, situations of more or less chronic sexual stasis. Then, however, he goes off into endocrinological speculation, arriving at such statements as, "We have strong hints that dysfunction of the gonads is impor-

tant in rheumatic conditions . . . If we study the broader question of the sex glands in relation to muscular tension we are able to obtain the most striking data." In other words, the author confuses the *sexual* function and its relation to muscular tension with the function of the *gonads*. He then reports on therapeutic results with male sex hormone in melancholia, Parkinson's disease and arteriosclerosis, deducing, from symptomatic improvement, that "these diseases are specifically associated with dysfunction of the sex glands." The author himself is somewhat uneasy about these endocrinological assumptions. He finds it necessary to point out that he is

> not afflicted with obsessions about endocrinology. . . . What I have said about endocrine dyscrasia does not invalidate current beliefs which stress the importance of infection, chill, fatigue, etc. . . . My theory delves farther back into the dark crevices of predisposition. I am viewing these cases from the standpoint of one studying personalities fundamentally prone to particular kinds of malady. And within the limits of our present knowledge the relative functioning of the endocrine glands determines the nature of the psyche.

With that, the author has exactly defined the nature of his "obsessions about endocrinology." The concept that "the relative functioning of the endocrine glands determines the nature of the psyche" is a metaphysical one. And as far as the *predisposition* to certain diseases is concerned, it is not the dysfunction of this or that gland, such as the gonads, which creates a predisposition; it is the disturbance of the *sex function*. This is a total biological function in which individual glands play only a minor role. In addition, the dysfunction of individual glands is usually only one manifestation among many of a disturbed vegetative economy, and may be secondary, that is, not the cause, but the *result* of a disturbed vegetative equilibrium.

The author recognizes the importance of sexual frustration in the etiology of cancer:

> Cancer is our greatest medical problem. It shows a rising incidence in the last few decades. . . . Cancer of the breast is a disease which arises often as a sequel to chronic mastitis. . . . The increased breast tension is associated with thwarted sexuality, desire for children, or both. . . . Chronic mastitis occurs in women with thwarted but still potent maternal and sexual instincts. It often attacks women of masculine configuration not amounting to virilism. These women have often a partly masculine psychology. They are tough, ruthless administrators. They are often psychologically homosexual. They retain the instinctive impulses of womanhood. They show the outward manifestations of manhood. They are tough specimens. This type is prone to carcinoma. . . . There is at least one other cancer where personality factors are predominant. This is the cancer, supervening on fibroid formation, in the virgin uterus of unmarried women. Here often the fibroid, and the subsequent cancer, express an inhibited desire to reproduce.

About the cancer specialist, the author has the following to say:

> Some observers question the derivation of breast cancer from chronic mastitis in any considerable number of patients. The more specialized the observer the more he denies the connection between mastitis and malignancy. On the other hand, general practitioners insist on the relationship. This is a fact of significance. General practitioners are more prone to regard patients as a whole. The surgical specialist concentrates too exclusively on the breast. Those exclusively devoted to cancer research suffer from the disabilities inseparable to ultra-specialization. They are liable to regard the disease they study as a rigidly closed circuit. They are seeking always a hard-and-fast connection between specific cause, specific symptoms and specific cure. The personality of the patient concerns them little. It is an unwelcome obtrusion into the pure air of mathematical exactitude.

While the author's concept thus differs from that of the orthodox mechanistic concept of cancer, the sex-economic concept of cancer differs even more widely from that of the author. The main difference lies, of course, in the fact that the author, in accord with customary concepts, considers the cancer tumor to be the cancer disease, while sex-economic cancer research has clearly shown that the tumor is no more than a symptom of a general disease, the cancer biopathy. (*Cf.* W. Reich, "The carcinomatous shrinking biopathy," *This Journal* 1, 1942, 131-155, and "Experimental orgone therapy of the cancer biopathy," *ibid.*, 2, 1943, 1-92). It is extremely difficult to see a connection between chronic mastitis and "masculine configuration," "a partly masculine psychology," "psychological homosexuality" and "outward manifestations of manhood." All these things are nothing but secondary manifestations of an inhibited genitality and have in themselves nothing to do with mastitis or cancer. Reich, on the other hand, has shown that the inhibition of the *total* sexual function may result in a *total* disease picture which he described as the carcinomatous shrinking biopathy, and that this total reaction is the soil on which the tumor develops. He has shown, furthermore, that patients who develop cancer are anything but "tough specimens." On the contrary, if there is any specific character trait to be found in potential or actual cancer patients, it is that of resignation, which corresponds to the process of "giving up," of shrinking, in the vegetative apparatus. There can be no doubt that the cancer of the uterus has a sexual causation, as has the fibroid of the uterus. However, not in the sense that "the fibroid, and the subsequent cancer, express an inhibited desire to reproduce." Such a formulation means psychologizing biological processes. The fibroid, or the cancer, do not "express" anything, they do not have any psychological "meaning." Such formulations are based on the common misconception that the Freudian interpretation of "meaning," which is valid in the psychological realm, also applies in the biological realm. As Reich has pointed out many times: While biological laws apply also in the psychological realm, the reverse is not true. Psychological laws do not apply in the biological realm.

All in all, this chapter is important inasmuch as it shows a realization of the importance of sexual frustration in the causation of physical disease:

> Since the outlets for sexual activity depend so largely on current ethics, the relation is obvious between the maladies discussed and the prevailing social system. . . . Chronic anxiety results most commonly from interference with the operation of a primary instinct. The most common instinct restricted by our present civilization is that of sex.

Part Two of the book deals with "The Neuropathic Nature of Disease." Chapter Six is on Disease As a Social Variable. The author points out our greatly decreased susceptibility to plague, cholera, smallpox and many tropical diseases. "Western man's relative resistance to infections is due to his altered nature." But we are not told in what manner his nature has changed. At the same time the author states, "We are polluted with neurosis. To a large extent neurosis does not kill. But it bequeaths to the next generation an impoverished vitality which will not merely express itself in neuroses or psychoses, but which will give rise sooner

or later, and mostly sooner, to rheumatism, peptic ulcer, etc. . . . The vitality of our stock is becoming impoverished."

The author then discusses the "Interchangeability of disease." "Mental, physical and nervous disease are interchangeable." This is, of course, correct to the extent to which they are the expression, in one form or another, of a disturbed energy economy. To the author, however, they are "alternative expressions of a general neuropathic tendency." He thinks it is "wise to classify neuroses, psychoses and organic diseases of the brain and spinal cord as equal evidences of an impoverished vitality of the nervous system. In terms of this crude classification it seems possible that what we call non-nervous physical disease (provided we limit ourselves to the chronic constitutional conditions) is attributable largely to some flaw in the endocrine glands plus an innate tendency to imbalance in the autonomic nervous system. In nervous conditions the focus of diminished resistance is in the central system." Thus, there is, unfortunately, again and again the reversion to brain mythology, to such metaphysical concepts as "flaws" and "innate tendencies."

Chapter Seven deals with the problem, NEUROTIC, FUNCTIONAL AND ORGANIC. The author fully realizes that this distinction, as commonly used, is fallacious and often pernicious:

> There is nothing more irritating and effete than this craze for precise nomenclature. It is an infiltration of bureaucracy into medicine. It is non-therapeutic. It is often illogical, seeing with what obstinacy man persists in defying classification. It is found chiefly in those pretentious departments of medicine where the alleviation of the pains of individual man is a secondary consideration. It is also found, significantly enough, in specialities like neurology and psychiatry, where treatment is too often unproductive. . . .
>
> We have seen that neurotic conditions may proceed through functional disturbances to organic disease. We have seen, too, that all these varieties of reaction may be present in the same patient at the same time. But to this day medicine largely insists that these types of reaction are mutually exclusive. Much valuable time is lost in the mephitic atmosphere of the wards of our teaching hospitals in distinguishing between the three categories. . . . This *idée fixe* about neurotic, functional and organic disease makes it necessary for the doctor to make up his mind too early. We have mentioned the possibility of his regarding organic disease as functional. The reverse process is just as dangerous. Cases are diagnosed as organic far too soon and condemned to unnecessary and restrictive invalidism.

But the author's practical illustrations show a confusion which is worth pointing out. He argues, for example, that if the value of Vitamin B is proven in peripheral organic conditions of the nervous system, it would be a mistake not to give it to the patient with functional nerve pains where it can be of immense benefit. True, if this results in symptomatic relief, and has no harmful effect, it may be indicated. But the therapist should not overlook the fact that this is a symptomatic and not a causal therapy, and that the question as to the nature of the functional disturbance remains. Only when this question is answered can one arrive at a rational, causal therapy. The author does, indeed, raise the question, "But why are the peripheral nerves selected for the expression of the functional, anxious or hysterical tendency?" But his answer is, "Because they are innately vulnerable." Similarly, in mucous colitis, while granting the importance of "tension, conflict of other psychoneurotic factors," he insists that the colon must be regarded as "especially vulnerable." As long as one cannot say in what this "special vulnerability" consists, it remains an empty word.

The author points out that some hysterical patients have convulsions indistinguishable from those of epilepsy. From this, he concludes, "The attitude we should adopt towards fits in both idiopathic epileptics and hysterics is that in both kinds of patient we are dealing with an *innate tendency* to produce convulsions." He asks: "Does not this separation into organic and functional obscure from our view the fact that in epileptiform hysteria and epilepsy we are dealing in both cases with an identical biological reaction?" After having posed this fundamental question, the author, in his attempt to answer it, is again misled by his metaphysical concept of "innate tendencies." He looks for the answer in the similarity between the epileptic and the hysterical personality structure, a similarity which he tries—unconvincingly—to prove. Why not stay with the formulation presented in the question, namely, that we are dealing with identical biological reactions? That is undoubtedly correct. This reaction consists in a convulsive discharge of dammed-up biological energy. This reaction, however, is specific neither of epilepsy nor of hysteria. We see such convulsive discharges every day in vegetotherapeutic practice, in patients who are neither epileptic nor hysterical. In itself, it is an entirely unspecific reaction. It is due to sexual stasis and therefore occurs in all neurotic individuals, that is, in all individuals who are orgastically impotent, in other words, incapable of discharging their sexual energies in a physiological manner.

The author then goes on to discuss a connection between epilepsy and dipsomania, "two diseases, at present considered entirely as separate entities, but which represent two different aspects of a more fundamental biological reaction . . . The peculiar and sudden violence of the dipsomaniac reaction is analogous to that which occurs in epilepsy. Both are total personality reactions . . ." But so is the catatonic raptus! The author mentions the role of sexual frustration in alcoholism: "Alcoholics are usually neglectful of coitus, the most ubiquitous of all sedatives [provided, one should add, that it is satisfying.—T.P.W.] . . . Your true alcoholic has usually a low sexual potential *ab initio*. Alcohol admittedly is the most accessible sedative. But can one explain on psycho-analytic lines the hereditary factor in alcoholism?" No, of course not, but neither can one explain or prove it in any other way. The author, however, considers epilepsy and alcoholism as "the two best examples of direct inheritance."

It is distressing to see how the author, almost after every attempt at a functional approach to this or that question, falls back into the alibis of heredity and brain mythology. Perhaps the worst example of the latter is the statement "that even in neuroses where the symptoms demonstrated are expressed in predominantly psychological mechanisms, e.g. the obsessional states, there is growing evidence that they are due to either organic lesions or dysfunction of the central nervous system. Obsessional neurosis has been ascribed with considerable justification to a mid-brain lesion." Such statements often make one feel like throwing the whole book out. There is, in fact, not the slightest evidence available to support such brain-mythological contentions, as is more and more openly admitted even among the traditional standard-bearers of brain mythology, the neurologists and "neuropsychiatrists." The only "justification," if you want to call it that, for such statements, is, of course, the desire to get away from the sexual causation of the neuroses; but that is only possible by inventing pseudoscientific and moralistic rationalizations.

The conclusion of this chapter shows

perhaps better than anything else the manner in which the author kills his own attempts to arrive at a functional concept in medicine:

> This concept of vulnerable foci automatically substitutes the theories of neurotic, functional and organic disease. It implies that whether the disease reaction is physical, or only quasi-physical, it will express itself primarily through the vulnerable organ. The latter is therefore to be regarded as of more fundamental importance in producing disease.
>
> Finally we must not forget that our best efforts in preventive medicine are forcing on us this gospel of vulnerable foci. When we recognize the pre-choreaic or the pre-dyspeptic child we are merely separating into groups cases where strain transmitted by and inflicted on the central nervous system finds in the one case a vulnerable corpus striatum and in the other a stomach innately weak.

What we need is not the replacing of the theories of neurotic, functional and organic disease, but a revision and understanding of them by means of a clinically valid concept of the functioning of biological energy. This concept has been provided by sex-economic investigation. If disease is understood as the result of a disturbance of this biological energy function, it becomes quite immaterial whether this disturbance shows itself in this or that organ. Moreover, whether it shows itself in one or the other organ is not determined by any "special vulnerability" of this or that organ but by the particular physiological mechanism of repression which the organism employs in a particular case. What is fundamental, then, is the disturbance of biological functioning, and not a supposedly "vulnerable" organ. If, for example, a patient with anxiety neurosis shows tachycardia or extrasystoles, this has nothing whatsoever to do with a "vulnerable heart" or "vulnerable cardiovascular system." It means merely that energy which is dammed up because of a disturbed genital function produces vegetative symptoms such as tachycardia or extrasystoles. The etiology, and the treatment, would be exactly the same if the symptoms happened to be diarrhea or muscular tremor, symptoms which in no way would indicate a "vulnerable intestine" or a "vulnerable muscular system." A woman who develops fibroids, and perhaps cancer, of the uterus, does not do so because her uterus is "vulnerable" but because, in order to suppress the genital sensations of which she has become afraid, she chronically contracts her pelvic floor and her uterine musculature, thus interfering with the normal flow of biological energy in these regions.

The "gospel of vulnerable foci," then, is a dangerously misleading one. It detracts from the basic biological functioning and centers our attention again on the individual organ, thus reverting to a mechanistic concept which medicine, for decades, has been trying to outgrow. No, preventive medicine does not force this gospel on us. On the contrary, if there are "vulnerable organs," "innate flaws" and other such God-given things, there does not seem much hope for preventive medicine in the fields here considered. The preventive medicine of the future will have to see to it that the disturbances of basic biological functioning are prevented. This means: no compulsive feeding of infants, no compulsive sphincter training, no suppression of infantile and adolescent masturbation; in other words, a different kind of upbringing. This, in turn, depends, of course, on a different kind of social system. This will not be a system thought up by doctors or social reformers but one brought about by society itself once society realizes that it keeps chopping off the biological branch on which it sits.

Chapter Eight is entitled DISEASE AS DISHARMONY. THE AUTONOMIC NERVOUS SYSTEM. Here, the author states:

> It can indeed be said that recognition of the importance of autonomic dysfunction in physical disease is a criterion of the progressive evolution of medicine.

True, as far as it goes. The importance of autonomic dysfunction has been increasingly recognized in recent decades; physiology and medicine have amassed a tremendous amount of material concerning the functioning and the dysfunctioning of the autonomic system. This has resulted in a situation of utter confusion in which nobody sees the woods for all the trees. In present-day medicine and physiology, these facts remain unrelated and seem often contradictory. They can be understood only on the basis of the basic antithesis of vegetative life as formulated by Reich[2], that is, in their relation to the basic antithesis of sexuality and anxiety. The author's attempts at finding his way in the maze of autonomic phenomena, lacking this orientation, are, correspondingly, unsuccessful. He speaks of autonomic imbalance as a given fact without asking the question where it comes from; a question which sex-economic investigation has answered beyond any doubt. It comes from sexual stasis. Instead, the author speaks of "innate functional imbalance" which "provides a groundwork for an immediate half-physical response to strain," "innate differences in the vegetative nervous system in different individuals," etc., and from such metaphysical formulations arrives logically at such loose conceptions as that of "disease as a general disharmony of the whole psyche," "the connection between autonomic function and the higher centres of the central nervous system," "fundamental tendencies to imbalance."

On the basis of such concepts, one can, of course, not arrive at any rational and causal therapy. "Treatment in the future," the author writes, "will return to the Greek ideal of something like an enlightened spa regime . . . Now rest is of absolutely fundamental importance in treating vegetative imbalance." One might ask, how it is possible to "rest" for a patient with anxiety neurosis, with violent anxiety, with tachycardia and extrasystoles, unless one removes the sexual stasis which causes these symptoms of vegetative disequilibrium? "Even now," the author continues, "despite the current enormous activity in the pharmacological aspect of therapeutics, we have produced few drugs capable of acting with efficacy on the autonomic system." There is a good reason for this, the same reason for which it can be safely predicted that there never will be any such drugs. In fact, the "current enormous activity" in the pharmacological field, the enthusiasm with which physicians dispense such drugs and the pathetic eagerness with which patients consume them, are only an expression of the prevailing therapeutic helplessness in the face of disturbances of the autonomic life system. There are, of course, drugs with a very pronounced effect on the vegetative system; but they have only a transitory effect and the therapeutic result can be only symptomatic. Drugs can never cure vegetative imbalance. There is only one cure for it, and that is the removal of the cause, sexual stasis. To the author, such cure—which is indeed inconceivable without the establishment of orgastic potency—seems altogether inconceivable; he does not even think of it. He thinks, typically, only of *controlling* imbalance. "It is of considerable significance that while we have made little attempt to derive means of controlling imbalance," he writes, "in the sensuous and fatalistic East they have progressed far in achieving such control. The system of Yogi has undoubtedly achieved remarkable results

[2] Wilhelm Reich, *Der Urgegensatz des vegetativen Lebens*, 1934.

in this direction." No doubt, it has. But is this the kind of results which we want to achieve? Do we want to institute a system which has only one aim, that of deadening vegetative sensations, a system in which a major part of the biological energy is used up in keeping the rest of it in repression? Do we want the balance of nothingness? No, instead of advocating such life-killing procedures, we should realize that, in fact, the difference between East and West, as far as the regulation of biological energy is concerned, is far from being as great as it may seem. What, for example, is the difference between Yogi concepts and the Western "mortification of the flesh"? What is the difference between Yogi practices and the practices which our children use in an attempt to get rid of their vegetative sensations which may lead to masturbation and other sex play which is threatened with punishment? They hold their breath, they stiffen their abdominal muscles, they "keep a stiff upper lip," they pull up their pelvic floor, in short, they engage in all kinds of practices of vegetative control which Reich, correctly, called a kind of universal Yoga method. It is clear, then, that there is only one way of *preventing* autonomic imbalance: that of safeguarding vegetative motility in the child. The most important aspect of our education is exactly the opposite, that of suppressing vegetative motility. Children are constantly exhorted to "pull their shoulders back," to "pull their stomachs in," to "keep their mouths closed," etc.; that is, they are encouraged to and threatened into establishing and maintaining bodily attitudes which are incompatible with vegetative balance. It is clear that when autonomic imbalance once is established, it can be eliminated only by eliminating these muscular attitudes. This cannot be done by "spa treatment," mechanical relaxation or drugs, but only by the establishment of orgastic potency.

The author does discuss "the relation between sex and autonomic activity." The discussion, however, is limited to meaningless phrases about the connection between central nervous system and autonomic system:

> The instigation of desire depends on the central nervous system. Desire is roused through the senses. Impressions from these are relayed to the central nervous system. The activation of desire is achieved by autonomic activity. Sexual activity is the supreme example of the correlated activity of the two systems. It is a total reaction of the psyche. . . . It is a kind of mass reflex of the whole personality of man.

Now, which is it? A total reaction of "the psyche"? Or "a kind of mass reflex of the whole personality"? And if the latter, what kind of a mass reflex? It all depends on whether this is just a turn of speech or a tangible biological reality as described by Reich as the orgasm reflex.

Chapter Nine, THE NEUROPATHIC ORIGIN OF DISEASE, starts out from the following premise:

> There are four types of disease where heredity plays an important role. These are mental defect, mental disease, the psychoneuroses and what we have called the strain diseases.

The rest of the chapter consists mostly of a reiteration, in different forms, of this erroneous premise, and of futile attempts to prove it. Sentences like, "In the psychoses heredity is again the most important etiological factor" belong in 19th-century textbooks and not in a contemporary book on "Disease and the Social System." As to neuroses, the author states:

> Former opinion believed that the neuroses were attributable to an innately impoverished vitality of the central nervous system. With the advent of Freudian analysis environmental factors were considered of greater importance. Even Freudians now admit in increasing numbers that infantile experience and environmental factors merely determine the nature of the neurosis and the content of the symptoms shown. We cling to the illusion that neurosis is caused by circumstance and so more accessible to cure, to hide the brutal truth of heredity from our patients and ourselves. Millions are exposed to adverse parental influences and exposed to shocks. Only a proportion succumb to neurosis. This latter fraction is attributable to predisposition.
>
> The increase in neurosis is so truly appalling that it may be a fatal factor inducing national decadence. In fifty per cent of individuals the family history, covering no more than three generations, will provide at least one indisputable case of neurosis.

The author then quotes several family investigations showing an incidence of 25% of severe nervous disorder, going up to 50% including such conditions as alcoholism and eccentricity. Now, the enormous incidence of neurosis is a well-known fact which needs no further substantiation. Reich has shown that the important factor in the neurosis is not the symptoms but the characterological reaction basis, that, in other words, the disturbance of biological functioning is just as severe in character neuroses as in so-called symptom neuroses. The appearance of symptoms means merely that the character defense mechanisms have proven insufficient. Obviously, any such investigation by questionnaire will reveal only the patent symptom neuroses; people will not record the character neuroses of which they are unaware. If we include these also, the incidence of neurosis in the general population is, of course, much higher than 50%; it is as high as the incidence of orgastic impotence which is found in well over 80% of the people.

All this proves nothing as far as heredity is concerned. If it be true that "even Freudians now admit in increasing numbers that infantile experience and environmental factors merely determine the nature of the neurosis and the content of the symptoms shown," does that provide any proof for hereditarian contentions? No. The recourse to hereditarian assumptions is almost always an alibi. In the case of psychoanalysis, the reason for this alibi is patent. Here, the regression to heredity took the form of the theory of the death instinct, the assumption of a biological, or, to use the favorite word of our author, "innate" tendency to suffer and die. This theory has been shown to be erroneous[8]. It is a twofold alibi: a) an alibi for therapeutic helplessness, specifically, the inability to master the patient's orgasm anxiety and masochistic reactions, and to bring about orgastic potency; instead of having to blame himself for his therapeutic inability, the therapist can blame an "innate tendency" in the patient. b) It is an alibi for not criticizing the social conditions which create the neuroses; if the patient develops a neurosis not because of living in a society which suppresses his normal genitality but because he has an "innate tendency" to suffer, we are relieved of the necessity of social criticism which does not make for friends.

Thus, we do *not* "cling to the illusion that neurosis is caused by circumstance and so more accessible to cure, to hide the brutal truth of heredity from our patients and ourselves." No, we cling to the *illusion of heredity* to hide the brutal truth from our patients and ourselves that the neuroses—supported as they are, on all sides, by our social system—are a very difficult therapeutic problem and that it is our social system which causes them. If "millions are exposed to adverse parental influences . . ." and "only a proportion suc-

[8] *Cf.* Wilhelm Reich, THE FUNCTION OF THE ORGASM, 1942, and *The Masochistic Character*, *This Journal* 3, 1944, 38-61.

cumb to neurosis," it does not follow that "this latter fraction is attributable to predisposition." For one thing, as already mentioned, this fraction is much larger than the author assumes if, as we must, we include the almost universal character neurosis. The question is, why do a small fraction of people *not* become neurotic? Not because they lack the "heredity predisposition" of the others; not even because they were not exposed to infantile trauma and an authoritarian education; but because, in spite of all this, they found their way, relatively early in life, into a normal genital life.

One must agree with the author that "the increase in neurosis is so truly appalling that it may be a fatal factor inducing national decadence." One can rightly go further and say that the prevailing character neurosis, the biological rigidity of man, is the basis of the present international disaster.

The whole argument of our author is really based on the assumption of a "diminished resistance of the nervous system," an assumption which is purely metaphysical in character. This assumption is based, essentially, on the old mechanistic concept of the role played by the central nervous system. "These hereditary nervous conditions," he writes, "are those who have risen vastly in incidence in the last century. During the same period the tempo of life has quickened. Man is more chronically anxious. Such psychological factors can only be received and transmitted by the central nervous system." Here is the old confusion of cause and mechanism. The central nervous system is conceived of in terms of a telephone exchange with incoming and outgoing wires which transmit impulses, commands, etc. Now, suppose I were to call the author on the telephone and tell him what I think about his book. If I tell him that I like his unorthodox approach to medicine, his aphorisms about the "test-tube doctors," etc., he will be pleased. If I tell him that I am disgusted with his brain mythology, his hereditarian alibis, his "innate tendencies," he will be displeased; perhaps he will get a rise in blood pressure and pulse rate. Would he think of blaming the telephone system for his reactions because it has "received and transmitted" my remarks? Yet, undoubtedly, they were received and transmitted by the telephone system. His pleasure and displeasure, his vegetative reactions at hearing my remarks, however, were caused by the content of my remarks; the telephone system has no more to do with them than that it has received and transmitted them. So it is with the central nervous system. It is no more than a receiving-and-transmitting mechanism, and not even the most important one at that. But the author goes on, page after page, about indications "that the vitality of the nervous system and its resistance to disease is steadily diminishing," and "evidence of the increasing vulnerability of the nervous system." He speaks of "mental excesses," "over-mentation" and thinks that "the simple factor of over-use is leading to decay [of the nervous system]," that "intellectual activity is a causative factor in such conditions [as migraine]."

Part Three of the book deals with "Social, Spiritual and Sensuous Factors," beginning with a chapter on SOCIAL PATHOLOGY.

> The strain diseases are going up. The adjustment of the strain factor is the major problem in medicine. Infections are less. We are told we are healthier. Infant mortality is down. This paves the way for statistical triumphs. Statisticians are thus enabled to give false conceptions of our life prospects. A century ago a large proportion of children died in the first two years of life. Today the vast majority survive. This does not indicate increasing health. We must beware of subtle finesse with rows of figures.
>
> Strain conditions like peptic ulcer, hyperthyroidism, rheumatism, arteriosclerosis, are rising in incidence. They occur at an earlier age. In our day their symptoms are ameliorated by the newer drugs. But the addition of a year or two of life to chronic invalids is not necessarily a sign of a country's increasing health.

Precisely. We have practically obliterated plagues like cholera, smallpox and diphtheria, but the diseases involving vegetative imbalance, the neuroses, cardiovascular disease and cancer, are increasing and medicine is unable to stem their rising tide. While the plagues accounted for a high mortality, these diseases account for a high morbidity, for invalidism and general unhappiness, for the inability to function fully and happily.

Now, after having spoken of strain and strain diseases for some hundred-odd pages, the author remembers, in the tenth chapter, that "we have not yet defined the origin and nature of this strain." He then proceeds to define it under the following headings: Disease and the rate of living; Industrial factors in disease; Change of occupation as a cause of disease; and Disease and the creative impulse. Now, there can, of course, be no doubt that "the increased pace of modern life," speed-up systems in industry, the adaptation to a new occupation, and the monotony of industrial work are, or can be, pathogenic factors. But the fact must be realized that these are only contributing—or precipitating—factors which would not in themselves be pathogenic were they not superimposed on more basic processes. True, the author states explicitly that he does not consider them the exclusive pathogenic factors; yet, they comprise his definition of "strain." Understandably enough, this does not seem wholly satisfactory to him: there must be something more fundamental. And so, at the end of the chapter he goes back to—the reader may have guessed it—the "innate tendency," the neuropathic personality:

> We are developing more neuropathic personalities, but we must learn to use the word neuropathic in a wider sense. Formerly it implied a tendency to psychoneurosis. In the future it will convey merely the tendency of a vulnerable nervous system to transmit external strains. Through the nervous system these stresses cause abreactions in different links of the endocrine-autonomic chain. Physical, mental and neurotic diseases are alternative expressions of the fundamental common denominator of strain.

This leaves us exactly where we were at the beginning of the chapter: "Strain diseases" are explained by a "tendency of a vulnerable nervous system" and by strain. This is pure tautology. It is also metaphysics: a nervous system, vulnerable or not, has no "tendencies." It is to be hoped that we not only learn *not* to use the word "neuropathic" in a wider sense, but to throw it out of medical terminology altogether. It is an anachronism, a relic from the period of brain mythology when it was believed that neuroses are a "disease of the nerves." This concept was proven to be entirely erroneous, as is known today to every enlightened layman, though the concept is kept alive by neurologists and the makers of "nerve medicines," for obvious reasons. If, now, the concept of "neuropathy" should be extended from the neuroses to those diseases which the author calls "strain diseases," this would block the way to an understanding of these diseases as thoroughly as the brain-mythological concept blocked the way to an understanding of the neuroses. Our author, as we have seen, devotes in fact a whole chapter to the "neuropathic origin of disease."

Generally speaking, the diseases which the author calls "strain diseases" belong

in the category of what Reich described as *biopathies*. Ah, some will say, just another of those words. No, this concept has a very definite meaning: Biopathies are disturbances of the biological function of pulsation in the total organism. This disturbance can be demonstrated in great detail not only clinically, but by laboratory observation and tests. This is not the place to discuss these findings. The reader must be referred to Reich's article, "The carcinomatous shrinking biopathy," *This Journal* 1, 1942, 131ff. I merely wished to point out that it is the ignorance of this basic biological process which leads to such rationalizations as "neuropathic tendencies" and "vulnerable nervous system."

In the following chapter, SENSUOUS FACTORS IN DISEASE, the author again asks the question, "What do we mean by strain?" and states, "Like life, like consciousness, it is difficult to define in strict metaphysical terms." As the author continually proves, it is even more difficult to define in strict *scientific* terms. At this point, the author tries to define strain "by finding some universally beneficial factor towards which it acts as an antagonist . . . There is one answer, and one only—rest." With that, he gets himself really into trouble, for his definitions of rest are just as vague as those of "strain." "Rest," says the author, "is the one sound antagonist to strain." But he fails to make clear what "rest" is. The section on "The therapy of repose" contains such statements as, "Health is an attribute of the whole psyche. It is a sensuous subjective state." Now, health as well as disease, as one would gather from many others of the author's statements, is not an attribute of the psyche, but of the total organism. Furthermore, it certainly is not a subjective state. Many individuals, with severe neuroses and psychoses, consider themselves subjectively healthy; many orgastically impotent individuals with a pathological erective potency, for example, consider themselves "particularly healthy" sexually, and many men with premature ejaculation similarly brag about their "being hot." I have seen any number of cases of women who were referred to the psychiatric clinic from other departments of the hospital whose case history carried the entry: "Sex life—normal." On being questioned about their sex life, and what they meant by a "normal" sex life, they would answer: "He don't bother me much that way." Subjectively, that was satisfactory to these women—because they were frigid; all they wanted was not to be bothered by sexual intercourse. Objectively, the story is a different one. Why did they consult the medical or gynecological clinic in the first place, and why were they referred to the psychiatric clinic from there? Because, no matter how they felt about it subjectively, their sexual stasis had resulted in their headaches, backaches or whatever it was that made them seek medical help. All this begins to make sense if we replace such concepts as "strain" by "disturbance of the biological function of pulsation." This disturbance cannot be cured by "rest" but only by the removal of this disturbance, by the establishment of orgastic potency which alone guarantees vegetative equilibrium. That this is not possible in a great majority of cases is another matter. This fact should be faced squarely. To escape into the assumption of a "vulnerable nervous system" will do no more good than the assumption of a "death wish" or the "innate sinfulness of man." This fact points far beyond the field of medicine: the biopathies will continue to increase as long as education and the major social institutions make normal biological functioning impossible through an antisexual upbringing and life-inimical moralism.

In the ensuing section, "Sensuousness and Purpose," the author states, "To the average man coitus is his greatest pleasure. Its completion affords him his greatest peace." One only could wish that were so. But if one considers the prevalence of orgastic impotence, one must doubt the correctness of this statement. The average man being orgastically impotent, it would be safer to state that his greatest pleasure lies in substitute gratifications such as making money or acquiring power. And what about the average woman? To her, certainly, coitus is not the greatest pleasure. In spite of all the author says about the importance of relaxation through sexual gratification, he is plainly unaware of the basic biological role of sexuality, for he states: "One day sex activity may be less necessary to us than it is now. We may be able to induce in ourselves deliberately states of repose which are at present most commonly procured by the relaxing mechanism of coitus." Even if that were conceivable, biologically, one may ask why on earth anybody should prefer such "deliberate induction of repose" to the pleasure of orgastic satisfaction! Relaxation, the author says, is "the basis of all repose . . . We would not so often wake with backache if the muscles of our lumbar spine, the constant indicator of exhausted man, did not maintain in sleep their abnormal tension." But why do they maintain it? Not because they are the "constant indicator of exhausted man," but the constant indicator of genital anxiety; because, if this tension were released even in sleep, the vegetative genital sensations of which, the sex-negative individual has become afraid, would break through and would cause anxiety.

Taken all in all, one can well agree with the author as far as the general thesis of this section is concerned: basically, it is an affirmation of the pleasure principle and the recognition of the fact that the inhibition of pleasure creates disease. But in order to make this thesis scientifically valid, pleasure has to be understood not in psychological and subjective terms but in the objective terms of biological pulsation, that is, the undisturbed alternation of pleasurable contraction and expansion.

In the following chapter, SPIRITUAL FACTORS IN DISEASE, the author expresses the belief "that the current uneasiness and scepticism as to the destiny and purpose of individual man and mankind as a whole, are of themselves factors initiating illness or determining its nature . . . Philosophic and religious doubting are potent factors in causing sickness." No, such doubting is not the cause, it is a *symptom* of disease. No individual who is happy in his love life and engaged in rational work has such doubts. "There is far less neurosis in people with a firm dogmatic religion, like Roman Catholicism, than in vague creeds like Anglicanism," says the author. That may be true if by "neurosis" is meant a manifest symptom neurosis. But an individual who adheres to a firm dogmatic religion will also be found to have a more rigid character armor; he may exhibit fewer neurotic symptoms, but he is no less—or even more—afraid of life and resigned to find happiness in a hereafter. . . . "Protestantism . . . implies a state of conflict." But where there is—still—conflict, there is much more likely to be insight and an incentive to cure. Under the heading of "Health and Religion" the author refers again to Eastern religions with their fatalism, not realizing that their fatalism is no less life-negating than the more aggressive Western religions. Under the heading "Health and Philosophy" the author contributes his bit in the currently so fashionable pastime of endowing "nations" with psychoses: "The pogroms, the episodic ferocity of the Huns, resemble the state of catatonic excitement in dementia praecox." One could only wish that mass-psychological problems were as simple as such facile bon mots suggest.

In Chapter Thirteen, NEUROSIS AND THE INHERITANCE OF TRAITS OF CHARACTER, the

author points to "the rising toll not only of the chronic constitutional diseases but the enormous growth of neurosis" and asks, "is there any prospect of reducing the incidence of neurosis?" It is true, of course, that psychoanalytic treatment is not possible on a mass basis, but that has nothing at all to do with its effectiveness or ineffectiveness as an individual therapy. Unsatisfactory as the results of psychoanalysis are in general, one can hardly say that "rational explanations added to old-fashioned prescriptions as to rest, exercise and occupation will give better results in the majority of cases than psychoanalysis," or that "a month in Switzerland may wholly change" a neurotic's view. The author believes in "the unalterable nature of most neuroses . . . The Freudian and Adlerian theories are of immense scientific and philosophical value. It is our own fault we have so misused them. We had far better have applied ourselves to using their findings to devise a social order less likely to impose undue strain. . . ." What is correct here is that Freud did not draw the social conclusions from his basic finding that it is social sexual suppression which creates the neuroses but evaded them by creating a cultural philosophy. But the author not only fails to indicate what a different, less pathogenic social order should be like, he even turns the clock backwards to pre-Freudian times: "The psychoanalytic teaching largely denied the influence of heredity in predisposing to neurosis. But . . . the hereditary factor is still of first importance." Quite illogically, the author continues: "We will do our best work by altering the pattern of existence for the whole community." He neither indicates what earthly good that could do if "the hereditary factor is of the first importance," nor does he say how the pattern of existence should or could be altered. Instead, he asks, "Can we do anything for the neurotics at present existing among us?" He thinks we can help "to build character," by "encouraging the patients to practise systematically the exercise of will." This is called "character formation as a treatment of individual neurotics, as opposed to the doctrine of analysis without synthesis." The real reason for the author's diatribe against psychoanalysis—in which, it is true, many correct criticisms are made of psychoanalysis, although for the wrong reason—is evident from the following:

> My action is, of course, criminal from the psychoanalytic standpoint. I add to their load of repression. But unfortunately maturity is integral with a certain degree of repression. We must necessarily restrict the reactions of childhood. . . . Man has learnt throughout the ages that civilization implies the governing of the lower by the higher nature. . . . The wide and too fervent practice of psychoanalysis might even involve a considerable threat to the best aspects of the moral order. It opens the floodgates of civilized repression.

That is, the diatribe against psychoanalysis has nothing whatsoever to do with its therapeutic effectiveness or ineffectiveness; it is motivated, purely and simply, by the fear of sexual and moral chaos. The author overlooks the fact that psychoanalysis long since has made certain that no such accusations could possibly be leveled at it: with the theory of sublimation and condemnation of the instinct, with the theory of the death instinct and with the postulate that therapy should adjust the patient to his environment. It is true, "We must necessarily restrict the reactions of childhood." But why? Because in the child with an average upbringing, these reactions are essentially unhealthy. They are unhealthy as a result of the suppression of normal, healthy instincts. If the primary instincts had not been suppressed, there would be no secondary, unhealthy drives to be suppressed,

and "the reactions of childhood," to the extent to which they do not fit adult life, would be automatically outgrown. It is not true that "maturity is integral with a certain degree of repression." On the contrary, it is the individual with repressions who "never grows up" and keeps displaying infantile reactions. The mature individual is not so because of repressions. On the contrary, he is so because he has no secondary drives to speak of which he has to keep in repression. The statement that "civilization implies the governing of the lower by the higher nature" means that sexuality is something low and base and must be suppressed in favor of "higher things" whatever that may be. To see what kind of "civilization" sexual suppression leads to we only have to look around us. Primitive societies, on the other hand, as e.g., the Trobrianders, where sexuality is not debased and not suppressed, have a far higher "civilization" than we if by civilization is meant the absence of neurosis, psychosis, perversion and crime. True, if in our society all moral restrictions were suddenly lifted, there would be moral and sexual chaos because the "opening of the floodgates of civilized repression" would release all the secondary drives of destructiveness, sadism, lasciviousness, jealousy and pathological envy. But the moralists need have no fear: psychoanalysis could not open these floodgates even if it wanted to; the fear and inhibition of the instincts is too deeply anchored in the character structure for that. Those who are afraid of the sexual chaos consistently overlook the fact that the conditions we have are already chaotic, as a result of the very "higher morality" on which they insist: adolescent sexual misery and juvenile delinquency, compulsive fidelity and infidelity, sexual brutality, perversions and all the other ornaments of "civilization."

But to go back to our author and his suggestions for the prevention of neuroses. He thinks that whether or not we will be able to deal with this problem "depends on whether or no we believe in the transmission of traits of character . . . If we believe in the hereditary transmission of character traits it is of considerable importance from the social point of view to encourage positive character formation in neurotics . . . The formation and practice of good or bad social habits tends to their continuance. And what we have developed tends to be transmitted." This is so utterly naive and unrealistic that it does not even deserve discussion. Such statements seem to be motivated by the author's overevaluation of heredity, his resentment against psychoanalysis, and his desire to avoid social criticism. So, while the author starts out by stating that the neuroses could be best prevented by "altering the pattern of existence for the whole community," he ends up in hereditarian mysticism.

On the subject of Medical Training, the author states:

> It is very necessary to study deficiencies in our training as students and our attitude as doctors. We are more than anyone responsible for erroneous concepts of disease. If we are to help as reformers of our social system it is necessary that our training helps us to recognise its flaws.

The author then discusses at some length some flaws in medical education and practice, such as the fact that textbooks of medicine do not mention the personality factor in such diseases as peptic ulcer; the decline of clinical standards as a result of expert and accessible laboratory technique; and many others. Correct as many or all of these criticisms and suggestions may be, they are not the decisive point. As sex-economic and orgone-biophysical research has clearly shown, the reason for the traditional failure of medicine in the most common diseases, such as colds, hypertension, cancer, rheuma-

tism, in brief, in all the biopathies, is its mechanistic thinking and practice. "There must be a radical alteration in medical education," says our author. About that, there can be no doubt. But not along the lines suggested by the author: "Medicine is an art. It must be taught as such." No, medicine is not an art, it is a science, but a mechanistic, unalive one. Neither should it be an art, whatever that is if applied to medicine. It should be a science but one based on a functional energy concept. Then, and only then, will the author's prediction come true: "The medicine of the future will simplify the present hotch-potch of diseases into far fewer biological reactions than we contemplate at present."

In a chapter on THE NATURE OF HEALTH the author expounds the peculiar theory that "health is essentially a feeling, a complex subjective sensation." It should be obvious that the subjective sensation of health is nothing but the reflection of objective biological processes, and that health, therefore, can be defined only objectively. Thus far, the only such definition is the sex-economic one. As Reich put it in THE FUNCTION OF THE ORGASM, "There is no doubt that the basic criterion of psychic and vegetative health is the ability of the organism to act and react, as a unit and as a totality, in terms of the biological functions of tension and charge." In this chapter, the author discusses the influence on health of fresh air, rest, exercise, dietetic factors, climate, modern living and relaxation, but says nothing further about "the nature of health."

In the final chapter, SIGNPOSTS, the author gives "the broadest summary of society's needs." Pointing out that he has urged the need for more pleasure, rest and relaxation; that mankind be freed from the bane of insecurity; that man should be allowed to acquire the art of living and should be freed from the shackles of organized religion and self-delusion, he states that the attainment of these goals depends on the political necessity of a proper peace.

> Such a peace should be a suitable prelude to the biological reconstruction of the world. Its terms should be based primarily on the major traits of German psychology. We are dealing with a people retarded emotionally. . . . Their activities are at the thalamic level. . . . I hope sincerely and unemotionally that the brains of their super thugs be preserved for pathological examination. This would be a primary war aim in a rational world. . . . This nation from every standpoint of humane biological evolution is to be regarded as offal. They may be curable, in the course of many generations, by moral precept backed ruthlessly by force, but in dealing with them we should remember that it is necessary for us to go back some hundred years in our methods of correction, since otherwise the whole world will be darkened for a thousand years. . . . I regret that I see no prospect of truly rational therapy. Sterilisation is the most humane and efficacious method of dealing with thalamic men.

It is only to be hoped that people who have such naive concepts of fascism, such brain-mythological concepts as "thalamic man," who want to turn the clock of scientific insight back some hundred years and who advocate fascist measures on the basis of their brain-mythological concepts, will have little to say in the making of the peace. To make such frivolous proposals is easy; to gain insight into the tremendous problems of mass psychology is another matter.[4] It is true, in the following pages the author mentions some of these problems: "Man has never accepted the responsibility for shaping the pattern of his life . . . Man has always accepted the external direction of his life. It must

[4] *Cf.*, e.g., W. Reich, DIE MASSENPSYCHOLOGIE DES FASCHISMUS, and "Fascist Irrationalism," THE FUNCTION OF THE ORGASM, p. 203ff.

come from within . . . Government of the people, for the people and by the people, has never existed. What we have known is government of the inarticulate by the vocal . . . As men we dread much. Most of all we fear freedom . . . Men hate freedom because it is a too-responsible state." Yes, all this is absolutely correct. But that is precisely where the problem begins, first of all with the question, "*Why* is all this so?" The answer lies in the biological rigidity of man, and in the functional identity of social structure and character structure. Once one realizes the magnitude of this problem one is forever cured of making glib proposals and of the temptation to play the social reformer.

"But most of all we, as doctors, must insist on playing a major part in the cure of a sick world," says our author. The first prerequisite for cure, however, is correct diagnosis, be the patient an individual or the world.

SEX EDUCATION IN THE SCHOOLS*

By Paul Martin†, M.D.

Editor's Note: The problem of sex education has recently come into prominence again, mainly for two reasons. One is a general trend toward increased frankness in sexual matters, vague and confused though this trend may be. The other is the increase in "juvenile delinquency," particularly in the sexual realm, which has forced the problem on people's attention. The striking thing about all the discussions of sex education is that they inevitably lead into a blind alley. What is even more striking is that nobody seems to see a problem in this very fact. This fact will undoubtedly continue to exist until a basic reorientation on a broad social basis takes place, a reorientation not primarily with regard to sex education but with regard to sexuality itself. We publish the following communication—which was written several years ago—because it points out where the basic problem lies, the problem which will have to be solved before any rational, that is, positive and helpful sex education will be possible.—T. P. W.

Even progressive educators often state that the problem of sex education can be solved by furnishing the child, at the age of about 8 or 9 years, with information on sex, "along the lines of information about the digestive processes," etc., supplemented later by "a brief and factual description of pregnancy, of venereal disease, and of the existing preventive methods." One can agree with a good many of these proposals when they concern themselves with actual sex education. But it seems to me that on the whole they show to what small degree the results of psychoanalytic and sex-economic research in this field have been put to use. I have the impression that circles concerned with sex education have not changed their views on this subject. They still believe that "if only the civic authorities would give their support, the teachers would be able to handle the problem."

As far as pregnancy and venereal disease are concerned, one can agree with the above, as long as the pupils are not frightened too much. It is also quite correct to place the biology of sex in the foreground. But we must remember that the sexual function cannot be put side by side with the other physiological functions of the body, and such a comparison often strikes people as repulsive. Actually, what we are concerned with is a person's ability to live, primarily his ability to experience desire, joy, and satisfaction in love. It is all the more important to stress this, since today there exists, more strongly than before, a tendency to resolve the whole problem into one of reproduction, or into a race problem, while few people strive to prevent sexual repressions and their results in the form of all kind of nervous illness. All of this suffering has its deepest roots in the fact that people lack the ability to attain a full and happy sex life. Today a person's sex life is seldom completely happy; more often it is the source of unhappiness and separation, nervous suffering and unwanted children.

When we, as progressive educators, consider this question, therefore, we are talking about nothing more nor less than the love life and happiness of humanity. From this point of view it is clear why "factual information," placing the question of sex education in the same class with race problems or reproduction, is often harmful and confusing. Indirectly it aids and abets a system of suppression and that particular form of education which, often unconsciously, pictures sex as sinful, harmful, or as a luxury that keeps the lower classes from struggling for a better life. We live today in an atmosphere of antisexual, moralistic and often ascetic prejudices and conceptions. This atmosphere is, on the whole, counteracted by nothing more than a vague desire to change it and find something better. This desire is found particularly among young people. It lacks leadership and receives little or no support among older people. Progressive educators can and must help. They must accept the challenge of this problem, since modern scientific psychology and study of human character structure have shown that the problem of sexual reform is the basic one in all cultural problems: morals, religion, nationalism, and prejudices, asceticism and, first and last, the submission to authority and the craving for leadership—all these things have their roots, for the individual as well as for the masses, in sexual suppression. Historically, this suppression developed simultaneously with the economic suppression which came with the transition from matriarchy to patriarchy. This fact emphasizes the basic importance of the economic factors. But at the same time it shows that the way in which these factors mold human structure, ideology and culture, is primarily by sexual suppression.

If, then, we want to fight against intellectual reactionaries, we must fight for the liberation of the sex life. We must, as well as we can, help people to achieve the highest joy and satisfaction in love. This goal corresponds exactly to the goal of the real educator who has the courage to make the well-being of the children his only aim.

And how can it be done? Here we face, among other problems, the question of sex education. First we must ourselves know the prerequisites of a happy and satisfying sex life. We may divide it into two parts, the inner and outer. For a healthy sex life you must have two partners, both unrepressed and free enough to be able to surrender themselves completely. The outer circumstances include, first and foremost, living conditions that make it possible for them to be together, nude, without the danger of interruptions; and a contraceptive technique that will not hinder the act of surrender (such as coitus interruptus), or take away some of the pleasure (such as condoms). It must be a technique that can be relied upon; today that means a pessary.

I repeat: the goal of education is that of preserving the young person's ability to experience love and to surrender himself or herself to it. This goal coincides with that of educating people to use their common sense and not to bow blindly to authority, of bringing up young people so as to make them able to escape nervousness and neuroses and to gain happiness.

Most important is pre-school education, particularly with regard to masturbation and sexual play. But we need to go far beyond this: to the education of the entire family. Reich has shown that present-day family upbringng is patriarchal, authoritarian and sexually repressive. We must create an environment in which the child can live his own life and have his own sex life. What forms it will take, we do not yet know; only the future can tell. We must fight against everything that portrays sex as something dirty, or merely as a reproductive process, no matter if this idea is supported by the state, the schools, the church or the parents, and whether or not it appears in the form of direct repression or that of "sex education."

We must, therefore, give a *sex education that will act as a liberating force,*

* Translated by Marika Meyerson.

† *Editor's note:* This is a pseudonym. Present conditions force us, unfortunately, to withhold the names of our European co-workers.

affirming life and sexuality. The last is decisive. We must ask of all sex education: does it increase or does it lessen sexual anxiety? Does it free the real life forces? Or does it make people retreat more than ever into themselves? As it now stands, practically all sex education increases anxiety and makes sex seem repulsive. As far as schools go, I know of only one—in spite of assiduous search—where sex education has not, on the whole, merely increased the fear of sex. This is not surprising since sex education today rests in the hands of people who—the best of intentions notwithstanding—try to further the officially supported sexual ideology: compulsive morality and monogamy, abstinence, etc., as represented by parents and teachers, physicians and religious leaders. For in sex education everything depends upon the spirit in which it is given.

If sex education is to have a liberating influence, therefore, we must find people who can teach it in a manner that will fulfill this goal. It is impossible to say in advance who will be best fitted to teach it, physicians or teachers or parents. There are some few in each group who are able to do it, but the majority are not. I believe we must discover slowly, by experimentation, who can best teach sex education. But it goes without saying that anyone who looks on the sex life of children and adolescents as sinful, as something to be suppressed, is useless as a teacher and can only do harm. Only those who believe in the right of every person to sexuality and happiness and want to help those who need help—and not merely with fancy words—are fitted for the task. We must realize, also, that the primary goal is that of creating an atmosphere where happiness and the right to a sex life is once more given the prominent place that belongs to it, as it was in primitive matriarchy, and as it will be again in a coming socialist world. We must also realize the feelings of the adolescent as he nears sexual maturity. At this time healthy sexual desires often spring up in the form of vague and half-conscious wishes for sexual love. It is exactly as with a young plant that cannot survive unless the best possible conditions for growth are provided, a plant that can be destroyed completely if it is trod upon.

In short: if you want to build a house, you must not begin with the roof. There is no sense in asking for sex education in the schools or elsewhere, before we know clearly *why* we ask for it, *what* it is going to be given for, and *with what, exactly, it is to deal*. When we have the answers to these questions, and only then, will we discover *how* to create that form of sex education which will serve its function best. And then we will be able to build the house solidly, beginning with the foundation.

NOTES

THE ORGONE ENERGY IN EARLY SCIENTIFIC LITERATURE

A question frequently asked by laymen as well as scientists is, "Why has the orgone not been discovered long ago?" The reader who is familiar with the orgone-biophysical literature will have realized that the discoverer of the orgone has asked himself this question many times. In his "Talks with an electrophysicist" he points out that the belief that the orgone phenomena have not struck any physicist or astronomer thus far is mistaken: (*supra*, p. 142f.):

> The atmospheric orgone has been seen and described by hundreds of physicists, astronomers, meteorologists, biologists and chemists. That the orgone was not discovered in a practical way long ago is due to the mechanistic splitting up of the natural sciences, the mechanistic verbalizations which were taken for explanations, and the lack of functional, that is, unitary thinking.

In going through the older literature on physics and natural philosophy one discovers again and again that a great many authors had more than an inkling of the orgone energy; that they described many phenomena which can be understood only on the basis of the fundamental functioning of this energy; and that they failed to discover it only because the investigation of basic biological functioning alone could lead to its discovery.

Following are two quotations from the writings of Newton[1] which illustrate the above exceedingly well (italics are ours):

1. LETTER FROM NEWTON TO BOYLE, 1769: "Honoured Sir,

I have so long deferred to send you my thoughts about the physical qualities we spoke of, that did I not esteem myself obliged by promise, I think I should be ashamed to send them at all. The truth is, my notions about things of this kind are so indigested, that I am not well satisfied myself in them; and what I am not satisfied in, I can scarce esteem fit to be communicated to others; especially in natural philosophy, where there is no end of fancying. But because I am indebted to you, and yesterday met with a friend, Mr. Maulyverer, who told me he was going to London, and intended to give you the trouble of a visit, I could not forbear to take the opportunity of conveying this to you by him.

It being only an explication of qualities which you desire of me, I shall set down my apprehensions in the form of suppositions as follows. *And first, I suppose, that there is diffused through all places an aetherial substance, capable of contraction and dilatation, strongly elastic, and, in a word, much like air in all respects, but far more subtile.*

2. I suppose this aether pervades all gross bodies, but yet so as to stand rarer in their pores than in free spaces, and so much the rarer, as their pores are less; and this I suppose (with others) to be the cause why light incident on those bodies is refracted towards the perpendicular; why two well-polished metals cohere in a receiver exhausted of air; why mercury stands sometimes up to the top of a glass pipe, though much higher than thirty inches; and one of the main causes *why the parts of all bodies cohere; also the cause of filtration, and of the rising of water in small glass pipes above the surface of the stagnating water they are dipped into;* for I suspect the aether may

[1] J. W. N. Sullivan: ISAAC NEWTON, 1642-1727. New York, Macmillan, 1938.

stand rarer, *not only in the insensible pores of bodies, but even in the very sensible cavities of those pipes; and the same principle may cause menstruums to pervade with violence the pores of the bodies they dissolve, the surrounding aether, as well as the atmosphere, pressing them together.*

3. *I suppose the rarer aether within bodies, and the denser without them, not to be terminated in a mathematical superfices, but to grow gradually into one another; the external aether beginning to grow rarer, and the internal to grow denser, at some little distance from the superfices of the body, and running through all intermediate degrees of density in the intermediate spaces; and this may be the cause why light, in Grimaldo's experiment, passing by the edge of a knife, or other opaque body, is turned aside, and as it were refracted, and by that refraction makes several colors. . . .*

4. When two bodies moving towards one another come near together, *I suppose the aether between* them to grow *rarer than before, and the spaces of its graduated rarity to extend further from the superfices* of the bodies towards one another; and this, by reason that the aether cannot move and play up and down so freely in the strait passage between the bodies, as it could before they came so near together. . . . And as the other body approaches more and more, I suppose the aether between them will grow rarer and rarer. These suppositions I have so described, as if I thought the spaces of graduated aether had precise limits. . . . *But really I do not think they have such precise limits, but rather decay insensibly, and, in so decaying, extend to a much greater distance than can easily be believed or need be supposed.*

5. Now, from the fourth supposition it follows, that when two bodies approaching one another come so near together as to make the aether between them begin to rarify, *they will begin to have a reluctance from being brought nearer together, and an endeavor to recede from one another; which reluctance and endeavor will increase as they come nearer together, because thereby they cause the interjacent aether to rarify more and more. But at length, when they come so near together that the excess of pressure of the external aether which surrounds the bodies, above that of the rarefied aether, which is between them, is so great as to overcome the reluctance which the bodies have from being brought together; then will that excess of pressure drive them with violence together, and make them adhere strongly to one another, as was said in the second supposition. . . . Now hence I conceive it is chiefly that a fly walks on water without wetting her feet, and consequently without touching the water; that two polished pieces of glass are not without pressure brought to contact,* no, not though the one be plain, the other a little convex, that the particles of dust cannot by pressing be made to cohere, as they would do, if they did but fully touch; that the particles of tingeing substances and salts dissolved in water do not of their own accord concrete and fall to the bottom, but diffuse themselves all over the liquor, and expand still more if you add more liquor to them. Also, that the particles of vapours, exhalations, and air do stand at a distance from one another, and endeavor to recede as far from one another as the pressure of the incumbent atmosphere will let them; for I conceive the confused mass of vapours, air, and exhalations which we call the atmosphere, to be *nothing else but the particles* of all sorts of bodies, *of which the earth consists, separated from one another, and kept at a distance by the said principle.*

From these principles the actions of menstruums upon bodies may be thus explained: suppose any tingeing body, as cochineal or logwood be put into water; so soon as the water sinks into its pores and wets on all sides any particle which adheres to the body only by the principle in the second supposition, it takes off, or at least much diminishes, the efficacy of that principle to hold the particle to the body, because it makes the aether on all sides the particle to be of a more uniform density than before. And then the particle being shaken off by any little motion, floats in the water, and with many such others makes a tincture; which tincture will be of some lively color, if the particles be all of the same size and density; otherwise of a dirty one. For the colours of all natural bodies whatever seem to depend on nothing but the various sizes and densities of their particles, as I think you have seen described by me more at large in another paper. . . .

Nor does the size only, but the density of the particles also, conduce to the permanency of the aerial substances; for the excess of *density of the aether without such particles above that of the aether within them is still greater;* which has made me sometimes think that the *true permanent air may be of a metallic origina: the particles of no substances being more dense than those of metals. This, I think, is also favored by experience, for I remember I once read in the "Philosophical Transactions," how M. Huygens at Paris, found that the air made by dissolving salt of tartar would in two or three days time condense and fall down again, but the air made by dissolving a metal continued without condensing or relenting in the least.* If you consider then, how by the continual fermentations made in the bowels of the earth there are aerial substances raised out of all kinds of bodies, all which together make the atmosphere, and that of all these the metallic are the most permanent, you will not perhaps think it absurd, that the most permanent part of the atmosphere, which is the true air, should be constituted of these, especially since they are the heaviest of all other, and so much subside to the lower parts of the atmosphere and float upon the surface of the earth, and buoy up the lighter exhalations and vapours to float in greatest plenty above them. Thus, I say, it ought to be with the metallic exhalations raised in the bowels of the earth by the action of acid menstruums, and thus it is with the true permanent air; for this, as in reason it ought to be esteemed the most ponderous part of the atmosphere, because the lowest, so it betrays its ponderosity by making vapours ascend readily in it, by sustaining mists and clouds of snow, and by buoying up gross and ponderous smoke. *The air also is the most gross unactive part of the atmosphere, affording living things no nourishment, if deprived of the more tender exhalations and spirits that float in it: and what more unactive and remote from nourishment than metallic bodies?*

I shall set down one conjecture more, which came into my mind now as I was writing this letter; it is about the cause of gravity. For this end I will suppose aether to consist of parts differing from one another in subtilty by indefinite degrees; that in the pores of bodies there is less of the grosser aether, in proportion to the finer, than in open spaces; and consequently, that in the great body of the earth there is much less of the grosser aether, in proportion to the finer, than in the regions of the air; and that yet the grosser aether in the air affects the upper regions of the earth, and the finer aether in the earth the lower regions of the air, in such a manner, that from the top of the air to the surface of the earth, and again from the surface of the earth to the centre thereof, the aether is insensibly finer and finer. Imagine now any body suspended in the air, or lying on the earth, and the aether being by the hypothesis grosser in the pores, which are in the upper parts of the body, than in those which are in its lower parts, and that grosser aether being less apt to be lodged

in those pores than the finer aether below, it will endeavor to get out and give way to the finer aether below, which cannot be, without the bodies descending to make room above for it to go out into.

From this supposed gradual subtilty of the parts of aether some things above might be further illustrated and made more intelligible; but by what has been said, you will easily discern whether in these conjectures there be any degree of probability, which is all I aim at. For my own part, I have so little fancy to things of this nature, that had not your encouragement moved me to it, I should never, I think, have thus far set pen to paper about them. What is amiss, therefore, I hope you will the more easily pardon in

Your most humble
servant and honourer,
ISAAC NEWTON."

2. FROM THE LAST QUERY OF NEWTON'S OPTICKS.

"Now by the help of these principles, all material things seem to have been composed of the hard and solid particles above-mentioned, variously associated in the first creation by the counsel of an intelligent agent. For it became him who created them to set them in order. And if he did so, it's unphilosophical to seek for any other origin of the world, or to pretend that it might arise out of a chaos by the mere laws of nature; though being once formed, it may continue by those laws for many ages. For while comets move in very excentric orbs in all manner of positions, blind fate could never make all the planets move one and the same way in orbs concentric, some inconsiderable irregularities excepted, which may have risen from the mutual actions of comets and planets upon one another, and which will be apt to increase, till this system wants a reformation. Such a wonderful uniformity in the planetary system must be allowed the effect of choice. And so must the uniformity in the bodies of animals, they having generally a right and a left side shaped alike, and on either side of their bodies two legs behind, and either two arms, or two legs, or two wings before upon their shoulders and between their shoulders a neck running down into a backbone, and a head upon it; and in the head two ears, two eyes, a nose, a mouth, and a tongue, alike situated. Also the first contrivance of those very artificial parts of animals, the eyes, ears, brain, muscles, hearts, lungs, midriff glands, larynx, hands, wings, swimming bladders, natural spectacles, and other organs of sense and motion; and the instinct of brutes and insects, can be the effect of nothing else than the wisdom and skill of a powerful ever-living agent, who being in all places, is more able by his will to move the bodies within his boundless uniform sensorium, and thereby to form and reform the parts of the universe, than we are by our will to move the parts of our own bodies. And yet we are not to consider the world as the body of God, or the several parts thereof, as the parts of God. He is an uniform being, void of organs, members or parts, and they are his creatures subordinate to him, and subservient to his will; and he is no more the soul of them, than the soul of man is the soul of the species of things carried through the organs of sense into the place of its sensation, where it perceives them by means of its immediate presence, without the intervention of any third thing. The organs of sense are not for enabling the soul to perceive the species of things in its sensorium, but only for conveying them thither; and God has no need of such organs, he being everywhere present to the things themselves. And since space is divisible *in infinitum*, and matter is not necessarily in all places, it may also be allowed that God is able to create particles of matter of several sizes and figures, and in several proportions to space, and perhaps of different densities and forces, and thereby to vary the laws of nature, and make worlds of several sorts in several parts of the universe. At least, I see nothing of contradiction in all this.

"As in mathematics, so in natural philosophy, the investigation of difficult things by the method of analysis, ought ever to precede the method of composition. This analysis consists in making experiments and observations, and in drawing general conclusions from them by induction, and admitting of no objections against the conclusions but such as are taken from experiments, or other certain truths. For hypotheses are not to be regarded in experimental philosophy. And although the arguing from experiments and observations by induction be no demonstration of general conclusions; yet it is the best way of arguing which the nature of things admits of, and may be looked upon as much the stronger, by how much the induction is more general. And if no exception occur from phenomena, the conclusions may be pronounced generally. But if at any time afterwards any exception shall occur from experiments, it may then begin to be pronounced with such exceptions as occur. By this way of analysis we may proceed from compounds to ingredients, and from motions to the forces producing them; and in general, from effects to their causes, and from particular causes to more general ones, till the argument end in the most general. This is the method of analysis; And the synthesis consists in assuming the causes discovered, and established as principles, and by them explaining the phenomena proceeding from them, and proving the explanations.

"In the first two books of these *Opticks*, I proceeded by this analysis to discover and prove the original differences of the rays of light in respect of refrangibility, reflexibility, and colour, and their alternate fits of easy reflection and easy transmission, and the properties of bodies, both opake and pellucid, on which their reflections and colours depend. And these discoveries being proved, may be assumed in the method of composition for explaining the phenomena arising from them: an instance of which method I gave in the end of the first Book. In this third Book I have only begun the analysis of what remains to be discovered about light and its effects upon the frame of nature, hinting several things about it, and leaving the hints to be examined and improved by the farther experiments and observations of such as are inquisitive. And if natural philosophy in all its parts, by persuing this method, shall at length be perfected, the bounds of moral philosophy will also be enlarged. For so far as we can know by natural philosophy what is the first cause, what power he has over us, and what benefits we receive from him, so far our duty towards him, as well as that towards one another, will appear to us by the light of nature. And no doubt, if the worship of false Gods had not blinded the heathen, their moral philosophy would have gone farther than to the four cardinal virtues; and instead of teaching the transmigration of souls, and to worship the sun and moon, and dead heroes, they would have taught us to worship our true author and benefactor, as their ancestors did under the government of Noah and his sons before they corrupted themselves."

A CLARIFICATION

In PSYCHOSOMATIC DIAGNOSIS by Flanders Dunbar, P. Hoeber, New York, 1943, we find several references to our work which are misleading and need to be clarified.

The following sentences appear twice

in the book (p. 53f., p. 576): "As Freud, Reich, and some others have pointed out, the musculature represents a sort of characterological armor . . . Muscle tension is a real psychosomatic borderline . . . binding vegetative energy."

This kind of reference to important scientific findings is inadmissible. Imagine the following sentence in a book on aeronautics: "The brothers Wright, Henry Ford and some others have built airplanes"; or the following in a book on physics: "Galileo, Kepler and some others have pointed out that the law of gravitation has a sort of validity." It is customary in scientific writing to distinguish clearly what one or the other worker has contributed to the clarification of a given scientific problem. The concept of the "character armor" is Wilhelm Reich's and has been clearly defined by him (*cf.* CHARAKTER-ANALYSE, 1933, and THE FUNCTION OF THE ORGASM, 1942). Freud not only did not accept character-analysis but did not even mention it in his writings. "Some others" can refer to nobody but Reich's co-workers.

On p. 120 we find the following sentence:

> Character analysis does not focus on probing to the depths of the unconscious and the instinctual life as in analysis of the libido, but rather on the manner in which the patient's defenses against his conflicts have found expression in his habits of feeling, thought and action, and have warped or colored his personality (Kardiner).

This is a complete distortion of the facts. The concept of character-analysis was defined and its technique developed by Wilhelm Reich. If anybody, in a scientific work, refers to character-analysis, it is his duty to use the term in the sense of its originator, instead of quoting somebody else who gives the term an entirely erroneous interpretation. From the writings of Reich and his co-workers[1] it is abundantly clear that—in contradistinction to a superficial association and interpretation analysis—character-analysis works precisely with the depths of unconscious instinctual life. More than that, the deep biophysical functions are the very center of character-analytic work. We strongly repudiate any contention to the effect that character-analysis does *not* concentrate on the biophysical depth mechanism of the sexual function. It was precisely because this is where character-analysis works that it opened an avenue of approach to the psychosomatic problem, an avenue which is still barred to anyone not using this method.

In THE FUNCTION OF THE ORGASM, 1942, Reich writes:

> The difference between my technique and Adler's characterological attempts was that it consisted in *character-analysis through analysis of the sexual behavior.* Adler, however, had said: "Analysis *not* of the libido, *but* of the character." My conception of the character armor has nothing in common with Adler's formulation of individual character traits. Any such comparison of the sex-economic theory of structure with Adler's characterology would betray a fundamental misconception. Character traits such as "inferiority feeling" or "will to power" are only superficial manifestations of the *armoring* process in the *biological* sense, i.e., in the sense of vegetative inhibition of vital functioning.

On p. 94 we find the following footnote:

> Wilhelm Reich has developed these principles [of relaxation] in combination with psychoanalysis to a high degree, and created "a new therapeutic technique" which he terms vegetotherapy. Theodore P. Wolfe, has given special attention to this matter.

[1] *Cf.*, e.g., Wolfe, Theodore P.: "Character-Analysis." *This Journal* 1, 1942, 96ff.

Not only is vegetotherapy—which for 10 years has brought revolutionary knowledge into the field of psychosomatic medicine—relegated to a footnote in a book of 741 pages on Psychosomatic Diagnosis. In addition, it is referred to as "a new therapeutic technique," in quotation marks. These quotation marks can have only one meaning and function: that of giving the reader the impression that vegetotherapy is *not* a new therapeutic technique. Dunbar knows very well not only that vegetotherapy is a new technique but also knows its importance. Yet, the footnote must give the reader the impression that vegetotherapy is some kind of "relaxation therapy in combination with psychoanalysis." The sentence, "Theodore P. Wolfe, has given special attention to this matter" has an equally deprecatory implication. It refers to the fact that Wolfe, in the course of psychosomatic research done years ago in association with Dunbar, and in his work at the psychiatric clinic, paid special attention to muscular tensions and techniques of relaxation. This fact would be worth mentioning only in conjunction with the more important—and unmentioned—fact that Wolfe found these techniques insufficient and therefore turned to vegetotherapy, which he has been practising for the past five years.

If our work is deliberately left unmentioned, we have nothing to say. If, however, the reading public is given a purposely erroneous impression of it, we are obliged to protest and correct.

The index of Dunbar's book on Psychosomatic Diagnosis does not contain the word "orgasm." Nor does it mention Wilhelm Reich's DIE FUNKTION DES ORGASMUS which appeared in 1927 and in which, for the first time, the core of the psychosomatic problem, the connection between *sexuality, anxiety and the vegetative system,* was presented. This book is well known to the author of PSYCHOSOMATIC DIAGNOSIS, as are later sex-economic publications. It does not matter here whether the omission of these works was intentional or not. The motives of an author are irrelevant. What matters is that an author who represents official psychosomatic medicine ignores publications which, during the past 17 years, presented the basic mechanisms of the biopathies, the very diseases which this psychosomatic medicine attempts to understand. This means that the responsibility for the realm of the biopathies rests with the workers of the Orgone Institute, and not with the representatives of official psychosomatic medicine. As incredible as the omission of the orgasm problem may seem to us, it is nothing but an indication of the fact that the psychosomaticists officially decline the responsibility for the central problem of psychosomatic medicine. This, of course, has inexorable consequences.

SOME OBSERVATIONS OF CHILDREN

Many parents who wish to avoid having their children undergo the tyrannies they themselves experienced in childhood find themselves nevertheless baffled and unresourceful in meeting the practical problems of nursery education along freer principles. All of us have grown up under old misconceptions and still carry to a greater or lesser degree the inhibitions and anxieties stemming from childhood restraints. All of us have the practical problems of making a healthy life for ourselves and our children in a world which does not, as yet, except in isolated small groups, or on a very superficial level, accept freedom. For this reason it has seemed useful to present some actual observations of everyday problems and how they were handled.

Feeding Problems. Bill was a bottle-fed

baby, but he was fed whenever he was hungry and not by the clock. If he wanted more than a "normal" feeding he had it. If he wanted less no pressure was put on him to take more. He was never waked up to be fed. His pediatrician was a little sceptical, but his mother said, "Sometimes I'm hungry and sometimes I'm not. Why shouldn't he feel the same way?"

Bill enjoyed solid foods early and liked variety. Here, too, his mother was quick to recognize that she, too, got bored with the same diet. When Bill was about fourteen months old he reached for the spoon for the first time. Thereafter he always had a small dish and a small spoon on his high chair for himself. This was not enough, however, and often he wanted the bigger spoon and the bigger dish as well. A great deal of food was slopped around as Bill learned to manage first one spoon and then the other. One day when a neighbor was giving him lunch she tried to be neater and to take control of the situation by requiring Bill to leave the big spoon alone and use only the little one. Bill threw a spoonful of vegetables smack in her face. The neighbor understood the reproach and tried to start over again more easily, but the contact was lost and the meal was a failure. Bill refused to have any more. An hour later he was ready to begin again, and the neighbor was willing to go along with him at his pace. Feeding is a total experience in which the child must function spontaneously and with initiative according to the level of attention and coordination he has mastered.

The disastrous effects of compulsive feeding were observed in Claire, a girl of four who was a patient in a psychiatric hospital. Claire had been the object of oversolicitous attention from a mother and grandmother and when she was brought to the hospital she could not feed herself. She had been on a hunger strike for a week and had many other stubborn traits. Her mother delivered her at the hospital with the comment, "I beat her every day with the hair brush, but of course I won't allow you to do that." Claire walked into the hospital shouting, "I won't eat, I won't eat." Claire was told she didn't have to eat. The first day, when the other children went to the dining room for meals, Claire sat outside on a bench chanting to herself, "I won't eat." No one paid any attention. The second day when deposited on the bench on the way to breakfast she burst into tears. She was brought into the dining room, but immediately screamed "I won't eat." She was told she didn't have to eat. The next two meals she came to the table and furtively watched the other children. On the third day she suddenly snatched a banana from the plate of the child next to her and ate it in nearly one mouthful. Then she started to eat the cereal with her fingers. It was clear she did not know how to use a spoon. After that there was no more trouble with Claire's eating, but for many weeks she prefaced each meal with the solemn statement "I don't have to eat," and often she could be heard chanting to herself "I don't have to eat."

In moments of fatigue children rebel against the standards of adults and this often shows itself at table. Isabelle was nearly five. She had watched her baby brother have his supper in the nursery, dawdling and playing with his food and spilling a good deal. At the supper table with her parents she behaved as the baby had. Her mother said, "If you'd rather have supper in the nursery we'll take it up there and you can eat the way you like. But if you want to have supper with us you must eat the way Mother and Daddy do." Isabelle chose to stay. She was able to make this choice because her mother had been able to offer it without a tone of reproof or punishment.

Toilet Training. Bill's mother asked the pediatrician when she should start toilet training Bill and received the sensible reply, "Not until he knows when he's urinating. Watch him and you can tell." In this connection the writer observed the following incident:

The mother was to be away for the afternoon and again the neighbor was caring for Bill. As the mother went out the door she said "If he's still dry when he wakes up from his nap I usually take him to the toilet. If he's very wet, just change him. There's no point having him sit on the toilet when he doesn't need to go."

He was dry when he woke so he was put on his small seat that fits over the big toilet. He urinated, watching the stream, and watching the water when the toilet was flushed. About two hours later, the neighbor was reading and Bill was playing with a ball in the corner. The neighbor, not very experienced with children, had not thought to take him to the toilet again, and Bill did not yet talk enough to be able to ask to go. Suddenly in a gush he urinated through his diaper, making a puddle on the floor. He looked startled but not dismayed. Then he stooped down, and obviously repeating what he had seen his mother do, he started to wipe it up, using his bare hand. The neighbor got a cloth and the two of them wiped it up together. She took him to the bathroom, but at the door he resisted saying cheerfully "All fru," so she changed him and he ran off.

Isabelle's mother had a job and therefore employed a nurse. Her first attempt with a "competent woman with excellent references" was unfortunate. The mother explained that Isabelle was not to be punished for "accidents" and the nurse agreed. But in the park the scorn of other nurses was too much for this woman's professional pride, and when Isabelle wet her panties she was shamed and ridiculed before the other children and their nurses. Isabelle's nurse did not consider this punishment. Out of the experience with this nurse, however, grew an exaggerated anxiety in the little girl every time her mother started to leave in the morning. After some exploration a new nurse was employed who was a young married woman with natural warmth and the situation cleared up after a short time.

One other situation is worth mentioning since its occurrence fills many parents with dismay. When a baby discovers his feces he very often wants to play with them. He has no more feeling about this than about exploring his mouth, or about watching or touching his urine. If he is very young he may even wish to put some of the excrement in his mouth, for his mouth is still his surest instrument for knowing the world. Bill was about eight months old when he made this discovery. His parents had slept later than he and when they got up to look at him he was painting the walls all around his crib with the soft brown mass and it was all over his face and hair. He was cooing with delight. His mother wiped his face, gave him a kiss and then bathed him and put him in his play-pen. Then she had the walls to wash, but, she commented, "After eight months of diapers, what's a wall." Bill's mother invented some materials for Bill to play with. She made two bowls, one of chocolate pudding and one of raspberry cereal and she and Bill played painting the play-pen. Now Bill is a year older and has finger paints. It might be added, however, that twice more Bill did a wall-painting job. The transition from self to object cannot usually be made in a single step.

Masturbation. Bill was having his bath. Clearly everything about the bath delighted him. First he sailed his red fish all around the tub, then he put its tail in his mouth and sucked it. Then he splashed with his hands. Then he swished his body up and down in the water. Then he played with his penis, letting the fish fall out of his mouth and laughed. Then he

swished up and down some more. He sang a little to himself. He started playing with his sailboat, reaching down with one hand to hold his genital while he pushed the yellow boat with the other till it capsized. At this moment the cook looked in to ask Bill's mother a question. "Mrs. B., you ought to slap his hands when he touches himself that way." Bill's mother looked down at the delighted baby. "Why," she said, "he isn't interfering with anyone."

Bill was eighteen months old when this happened. At a little older age, when a child can talk, has learned to know that the bathroom is the proper place for going to the toilet, he can begin to be conscious about masturbation as a private matter also. This should be handled directly and simply by the mother exactly as bathroom habits are. It doesn't seem sensible to this writer to relegate such privacy to the bathroom since such associations as are formed may take on a negative character later as he encounters the attitudes of other children toward bodily functions of all sorts. If the child has his own room that is the place for his privacy. If not, his mother's room will serve.

Isabelle's mother related the following: When Isabelle was four her mother took her to a long public ceremony where the presence of the child meant a great deal to the participants in the affair. When the day was over, the little girl had behaved beautifully, but was solemn-eyed, strained and tired. Her mother said to her: "It meant a lot to Aunt K. to have you come along today. But I know it wasn't any fun for you. Now the next two days are all yours. We'll get Ruth (a cousin of the same age) and the two of you can do *anything* you want—only you can't climb on the window sills because that's dangerous (in a tall apartment house), and if you want to too too (nursery language in this household for masturbate) better go in Mother's room where you can be by yourself." Isabelle's mother, describing the two days said "we romped, we cooked, we climbed over the furniture, we built houses, we played hide and seek and we made *noise*." By the second night Isabelle and Ruth were tired and happy and ready to live more quietly.

Masturbation which is affirmed, guided, recognized by both child and parent has none of the compulsive characteristics of neurotic masturbation. Some observations of little boys showed two aspects of neurotic masturbation at an early age.

A mother and a grandmother were walking with two children along the railway platform. Between them walked the baby, about two, holding the hand of each of them. A few steps behind, obviously withdrawn and feeling neglected was the older child, a boy of about six. The mother and grandmother walked too fast however, and the baby fell down. She clearly was not hurt but set up a howl of rage. Mother and grandmother fussed over her and kissed her many times while the howling which was achieving its purpose was maintained. The boy, watching, turned and walked away. With his hand in his trouser pocket he was masturbating, unconsciously comforting himself for the overt discrimination in favor of the younger.

Two little boys, not more than six and seven, one just a little bigger than the other, were playing on the sidewalk. The larger boy was teasing the smaller, offering him a ride on a tricycle and then snatching it away. The little one attempted to hold his own but he wasn't strong enough and couldn't run fast enough. Finally he ran down the street after his tormentor, holding his genital as he ran.

Both of these incidents show children who spontaneously attempted to express their outgoing needs in the face of obstacles that were making them feel constricted. Yet neither understood what he was doing and therefore was not able to really achieve comfort or to find an appropriate time and place. It was unconscious and compulsive.

A different kind of situation was observed in a little boy on the bus with his nurse. The boy was about two, fat and unhealthy-looking. The little boy kept holding his genital and the nurse would brush his hand away, laughing and googling at him to distract his attention. This took on the character of a game, the boy laughing up at her and then slyly and quickly grabbing himself, then she brushing his hand away, each trying to outwit the other. Here was suppression with a smile; the child had already learned not to trust the smile and to meet craft with craft.

Sexual information. It now seems almost out of date to point out that sexual information should be given simply and naturally at any age whatever in which questions are presented. Yet many parents are unable to accept this simple principle. They think the child is too young, or they want to be "completely frank with the child" giving him explanations far beyond his comprehension.

Bill plays with Jane who is six months older than he, and is the child in the block who is nearest his age. Bill's mother thinks he needs to get used to other children, and since he's been playing with Jane he has learned to share toys, has begun to talk more. After the following incident with Jane's mother she was very disturbed and thought of perhaps not having him play with Jane any longer.

Jane was spending the day at Bill's house. The two children had had lunch and a nap and were being taken up and got ready to go to the park. Jane was awake first and was dressed first. Then Bill woke, and was taken in to the toilet. Jane followed along. This was clearly the first time she had ever seen a little boy's genitals. She was fascinated, and when Bill was through urinating Jane got a little piece of toilet paper and wiped his penis. Then she wanted to repeat the performance, but she was a little awkward and rough. Bill's mother said, "I think he's dry now. And that's a very sensitive part of the body. We must always touch it gently." That was the end of the matter for the afternoon. Bill's mother told Jane's mother about it when she came to take Jane home. That night when Jane was having her bath she looked down at herself and said "No Bill." Jane's mother said: "Bill hasn't been very well so he has that swelling now, but after he's better it'll go away."

It might be added that Jane, although only two, has a flirtatious, adult-conscious bearing. Although she seems quite free in her play with Bill there is something artful in her manner with grown-ups.

Bill's mother was in a dilemma. Certainly she did not want to think of ever leaving Bill under the supervision of Jane's mother. On the other hand, could she talk to her directly without upsetting a friendship and the social relations of the children and adults in the block? She decided for the present to make excuses to have Jane and Bill together only when they were outdoors in the playground, and to await a spontaneous opportunity to talk with Jane's mother about some of these questions of children's behavior. Jane's mother commented once that "she was so glad she had a girl. There was something repulsive about little boys."

The mother who wants her child to remain free often feels herself in a dilemma with her friends and their children, which may not be acute in the first two years when the child is still very much homebound, but which increases as the child encounters other adults and the disapproval of his own age group who have been repressively educated. If parents will however speak the truth to their children about their own natures and the objective problems of living together in a society and feel comfortable about what they are say-

ing inside themselves, they will not find the difficulties they anticipate.

A parent, zealous for truth, put her ten-year-old son in a very difficult position in the following way: A friend of the mother's had a child by a man to whom she was never legally married and with whom she lived only a brief time. This mother had never attempted to cover up the situation or to invent any fictions about it, either to her daughter, Nancy, or to her friends. On the whole she had been quite successful in her open attitude. One day Roger, the ten-year-old, heard some talk at the dinner table about Nancy and her mother. He asked where Nancy's father was. His mother, instead of answering the specific question simply by saying the truth, namely, that Nancy's father was now living in another country, replied with what she believed to be a "frank" statement. She said, "Nancy hasn't got any father. She's illegitimate." The first part of this statement was false, the second a legalistic and social concept beyond the boy's comprehension. The fact that he did not comprehend was shown some days later in a discussion at school. The boy maintained that children did not have to have fathers, that he knew a girl who was illegitimate, using that term. The teacher told him he must never say such a disgraceful thing again, making him feel guilty and even more confused by her attitude. Only a neurotically inhibited mother would have created this problem for her son. Yet, like many intellectuals, she imagines herself free because she is willing to say some things that others shy from. She defended herself in this instance by saying, "Nancy's mother hasn't lied to her, so why should I lie about it?" Compulsive truth and compulsive conventionality combined to offer the child a confusing and damaging experience.

The child in association with adults. A child's relation to adults, his behavior toward them and expectations from them can be firmly established in the first few years of life in the home. It is important that not all the early life of the child is spent in a special nursery world, but that he takes his appropriate place among the members of the family with mutual recognition of one another's rights. Bill, for example, has his own corner in the living room. He plays there for a considerable span of time with his toys without seeking attention from others in the room. When he does want things adults are using—books, ashtrays, newspapers and magazines, his mother sees that he has one of his own of the same article in his corner. So in the kitchen, too, he has his kettle, his spoon, often even his carrot and his potato. Bill was less than a year and a half old when he could clearly discriminate what was his and what was not and accept denial when he wanted the things of other people. This was because he had grown up from the very first under such a regime.

Many parents are at a loss to know how to talk to their children. They either pooh-pooh the child's own coined words as baby talk and insist on the adult words, or they condescend to and infantilize the child with a surfeit of baby talk of their own. The writer is an advocate of nursery language but not baby talk. By nursery language I mean the terms a child coins, particularly about himself, and with which he feels comfortable. Nursery language should be used primarily in direct conversation with the child, seriously, with the recognition that when the occasion offers the child must be helped to replace this with an adult vocabulary without becoming self-conscious or confused. A parent who thinks her child's language "cute" will break the feeling of comfortableness that the child has and make him learn to capitalize on what should be spontaneous, simple and serious.

Nurses. Not enough can be said about the kind of persons left in charge of a child when the parents are away. In the one-servant household this is often a woman chosen for her ability to cook, or her willingness to do general housework, rather than for her suitability to care for a child. It goes without saying that a woman must be sexually healthy in order to give a child an appropriate environment. She herself must be "on the child's side"; must be comfortable with herself, decent and simple and patient. It is not enough that she be experienced with children, or for that matter that she be married. Her attitude toward human relationships generally as well as toward the problems of child training will give a certain index to suitability. But these attitudes cannot be judged in terms of whether she merely says yes to her employer's wishes. Appropriate people are hard to find. Especially the woman who works outside the home has a problem in this area. Isabelle's mother, who could afford only one servant, found a suitable person after trial and error who was, however, not up to standard in many other household responsibilities. Isabelle's mother preferred to do the extra cooking and housework herself, however, in order to have the person who was right for the child.

Some general principles. These brief observations show up a few general principles which might be restated here. First we might say, "Enjoy your child." Then: Spend time with your child. Respect his spontaneous needs. Don't be in a hurry. Try to remember what the world looks like to him at whatever age he is.

FROM THE ORGONE INSTITUTE PRESS

The following books by Wilhelm Reich are now translated into English and will be published as soon as feasible:

CHARAKTER-ANALYSE, 1933.

MASSENPSYCHOLOGIE DES FASCHISMUS. Translated from the manuscript of the 3rd German edition, revised and enlarged.

SEXUALITÄT IM KULTURKAMPF, 1936.

The "Excerpts from A. S. Neill's THE PROBLEM TEACHER," published in the JOURNAL, have created considerable interest in various quarters and have led to the publication of an American edition of the book. It is published by International University Press, 227 West 13 Street, New York 11, N. Y. Price, $2.50.

As in 1943, Nos. 2 and 3 of the JOURNAL are issued together, in a double number. This is necessitated by reasons of economy in time and money. The reduced bulk of Volume 3 of the JOURNAL may give the impression that its volume has been reduced. This is not the case. In the interest of paper conservation, the JOURNAL is now printed on lighter and less bulky paper than before. The number of pages is actually larger than in Volume 2.

ADDRESSES OF THE INSTITUTE

It happens frequently that mail for the different sections of the Institute is sent to the wrong address, which results in a waste of time and effort. We should like to ask the readers to note the following addresses:

Personal communications to Dr. Reich are to be sent to

Dr. Wilhelm Reich
99-06 Stafford Avenue
Forest Hills, New York
Telephone: BOulevard 8-5997

Inquiries about the orgone and cancer research and about orgone accumulators are to be sent to

Orgone and Cancer Research Laboratories
99-06 Stafford Avenue
Forest Hills, New York
Telephone: BOulevard 8-5997

Orgone accumulators are to be returned to

Orgone Institute Laboratories, Workshop
Miss Clista Templeton, Manager
Oquossoc, Maine

Orders and payments for books and Journals, and inquiries about publications, are to be sent to

Orgone Institute Press, Inc.
400 East 57 Street
New York 22, N. Y.

Editorial correspondence concerning the Journal *is to be sent to*

Dr. Theodore P. Wolfe
401 East 56 Street
New York 22, N. Y.

REVIEWS

Guyon, René: The Ethics of Sexual Acts. Garden City, N. Y.: Blue Ribbon Books, 1941.

As the title of the book indicates, the author aims to examine the sexual problem from the ethical point of view. In his preface, however, the author states that this first volume "is essentially a physiological or, to use the current expression, a psycho-physiological study." Specifically, this work intends to set forth the facts "which, when considered in relation to one another, will render possible a truly scientific view of sexuality, freed from sterile traditions; and which, above all, will give us a precise conception of those moral values which we must reject." Our critical attention must therefore be directed to both the ethical and scientific aspects of this study.

In the chapter entitled "The Morality of Sexual Acts," Guyon sets forth the following ethical principles:

> 1. The convention which regards the sexual organs as shameful is without any foundation in reason, logic or physiology. . . .
>
> 2. The acts accompanying sexual pleasure find their only and sufficient justification in the pleasure which they bring; sexual pleasure is therefore just as admissible as any other natural satisfaction, and its exercise, in whatsoever form may be preferred, has nothing to do with morality, the virtue or the dignity of either sex.
>
> 3. There should therefore be no disgrace, either for the man or the woman, in procuring or in giving sexual pleasure; it is the lawful and natural exercise of a physiological act.
>
> 4. Sexual pleasure is always lawful, whether it is obtained with a view to reproduction or as an end in itself, i.e., for the mere purpose of obtaining a specific satisfaction.
>
> 5. Everybody has the right to exercise quite freely his own preferences in matters of sex, so long as he is guilty of no violence or deceit to others; the right to sexual satisfaction is just as inalienable as the right to eat.
>
> 6. The hygiene of the sexual sense and sexual organs is a matter of science and of personal responsibility, just as is the hygiene of the nutritive function.

With these ethical principles there can be no disagreement. What two adult persons do to obtain sexual pleasure with each other is a matter of personal hygiene only; their actions cannot be judged ethically as either immoral or unlawful. It is another matter, if an adult attempts to impose his sexual practices upon a child or young adolescent.

So much for Guyon's ethical concepts. Let us look, now, at the scientific view of sexuality which Guyon presents as a corollary to his ethical principles. We quote from page 344:

> There are no sexual aberrations. There are only differences of procedure, cunningly combined according to individual variations of taste, together with preferences for particular persons or classes of persons: and that is all.

From this he sets up the following principles:

> 1. It is wrong to suppose that ordinary coitus is the only normal mode of sexual satisfaction. . . .
>
> 2. Every mechanical means of producing sexual pleasure is normal and legitimate. . . .
>
> 3. The personal characteristics of the sexual partner have nothing to do with the physiological manifestations of sexual pleasure itself.

Is there no biological difference, then, between coitus with a natural love object

and onanism, homosexuality, exhibitionism, incest and fetichism? Because these ideas of Guyon's are quite widespread among so-called liberal thinkers in sexuality, it becomes incumbent upon us to subject them to the scientific principles of sex-economy.

The author advances several arguments to support this thesis. First, he equates adult sexuality with infantile sexuality. On page 74, we find this remark: "Indeed, we may say of coitus that it only corresponds to a brief moment in the whole complicated development of the pleasures of love. The various forms of satisfaction that precede it, though doubtless less intense, have such a fascination of their own, that connoisseurs of sexual pleasure willingly prolong them. But these satisfactions, though among adults they may eventually lead to copulation, are of exactly the same nature of those of the pre-adolescent." Proceeding from Freud's demonstration of the polymorphous nature of infantile sexuality, the author argues that since this condition is natural for the child who is further removed from conventional sexual restrictions than the adult, it is the natural condition for all persons.

This argument is untenable. Behavior which is natural for the child is certainly not natural for the adult. The admission that perversions are regressions to the infantile level proves the etiology of the disturbance. The fact that such actions are also components of normal coitus does not justify the claim that they represent normal sexual aims in themselves. Freud's definition of the perversion is still true: "It is morbid if the perversion does not appear beside the normal (sexual aim and sexual object), where favorable circumstances promote it and unfavorable impede the normal, or if it has under all circumstances repressed and supplanted the normal."

Two other remarks of Guyon in the above quotation require comment. What is meant by the "complicated development of the pleasures of love"? If there is to be any pleasure in love, it would result only because of a lack of complications. I have always objected to the use of the word "connoisseur" with reference to love or sexual enjoyment. The so-called connoisseur frequently turns out to be only a libertine. We shall have more to say about this later.

The second argument Guyon advances is an analysis of the reason for the suppression of sexuality. In this presentation, he commits a common methodological error. He assumes that sexual suppression resulted from early primitive taboos. To quote, from page 157:

> Thus, as a ransom from terror, the taboos of deprivation settled down upon the human race. . . . Since, of the various sources of pleasure, the sexual one is the most highly prized of all, it is easy to foresee that its deprivation will play a part in those renunciations which must be made to the gods as a price of their protection; and that it will become the object of a particularly strong taboo of its own. This indeed is what actually happened. . . .

Did it really happen that way? The fact that two events, taboo and active sexual suppression, are concident in time does not justify the assumption that the former gave rise to the latter. As a matter of fact, the earliest taboo on sexual relations, the law of exogamy, simply limited the class of persons with whom sexual relations could be entered into. We quote from Freud's TOTEM AND TABOO: "The members of the same totem are not allowed to enter into sexual relations with each other; that is, they cannot marry each other." Further, Wilhelm Reich has shown in his book, DER EINBRUCH DER SEXUALMORAL, that it was the suppression of sexuality and the growth of private property interests which gave rise to the taboos.

To be unaware of the connection between sexual suppression and private economic interests in society is to fail in any attempt to eliminate the former. The relation between the two in primitive society is revealed in Malinowski's work, THE SEXUAL LIFE OF SAVAGES. Unfortunately, the origin of sexual suppression is not so simple as Guyon makes it out.

We come now to the physiological part of Guyon's book. The third argument to support the view of sexuality presented above is "The Mechanistic Theory of Sexuality." Quite correctly, the author distinguishes between reproduction and sexuality. But the manner in which this distinction is made is subject to critical review. In the chapter on the physiology of sexuality, we find the following:

> The parallelism with the other senses is so exact that it is impossible to avoid the conclusion that in reality there exist two systems, which are only too often confused with one another: the function of reproduction, and the sexual sense. . . .
>
> In view of the importance of correct terminology in this field, it will be better to express ourselves more exactly and scientifically, and to say that animals, and especially mammals, possess this specific sixth sense, which is a sense of neural pleasure. . . .
>
> There are certain preferences, not always easy to explain, which are important here, though they are often not more inexplicable than the preferences to be met with in some other sensations, such as taste. . . .
>
> When a mechanical cause is at work, it operates without any reference to the nature or quality of the mechanism; hanged men have orgasms and ejaculations, as the result of a condition which is destructive to life. This indifference of the sense to the quality of the mechanism has, as we shall see, a great importance for the proper understanding of the so-called sexual aberrations, and we shall have no difficulty in showing that the role of the stimulus, whatever it may be, consists, in the last resort, of certain movements, i.e., of a self-sufficient mechanical formula.

We have quoted extensively from this chapter because if the statements quoted above are biologically correct, the conclusions which Guyon draws follow inevitably.

Is there any basis for the comparison between sexuality and the recognized senses? Histologists can point to specialized cells which serve as receptors of various stimuli. Thus there are taste buds for the sense of taste, retinal cells for vision, tactile nerve cells for touch; but no one has discovered a specific receptor for sexual stimuli. Further, it is difficult to follow Guyon's distinction between sense and function. In biology, one does not speak of a nutritive function. The alimentary tract serves one function, the liver another; every special organ serves a special function.

There is good reason for the suspicion that the comparison between sexuality and the senses is made to justify the inexplicable preferences which are met with in the pursuit of pleasure. But even here, I cannot agree with Guyon. Psychoanalysis has shown the origin of the sexual aberrations (*see* Freud's "Three Contributions to the Theory of Sexuality"). So too in matters of taste, these preferences can be shown to be due to early education and environment. My dislike for cereal stems from a childhood feeding experience.

Now, what of the claim that sexual pleasure is merely the result of a mechanical stimulation and that the pleasure is indifferent to the nature or the quality of the mechanism? Before we answer this question, we must know exactly what is sexual pleasure. Guyon says, on page 112, "There is a *specific pleasure* [italics the author's], very vivid, and at its height very intense, which comes from the physiological exercise of these organs. . . ." He re-

fers here, obviously, to the orgasm; for we find on page 96 the following remark: "The congestion which manifests itself during orgasm and finds expression in its specific pleasure . . ." But nowhere do we find a description of the orgasm; instead there are remarks which indicate that the author is not too familiar with the exact nature of the sexual pleasure of which he speaks. For example, he states on page 107: "Orgasm, which is of course intimately connected, both actively and passively, with the secretions, may also be brought about by reading or by looking at pictures." The stimulation and excitation which some persons may experience by reading or by looking at pictures is far removed from the very vivid and very intense pleasure referred to above. In a footnote on page 84 the author states that "if one presents a monkey with some favourite morsel, he often experiences orgasm on taking it or eating it." The clue to Guyon's misunderstanding is to be found in an earlier quotation: "Hanged men have orgasms and ejaculations as the result of a condition which is destructive to life." The report that hanged men have ejaculations has frequently been substantiated, but they experience no pleasure in the reaction; and a deep satisfying pleasure is the core of the orgasm.

In sexological literature, the orgasm is, too frequently, confused with the ejaculation. That is apparently Guyon's error. They are two entirely different things. We all know that in premature ejaculation, for example, there is emission without pleasurable sensations and often with feelings of disappointment and disgust. A true understanding and description of the orgasm is found nowhere but in sex-economy. It is fully set forth in The Function of the Orgasm by Wilhelm Reich. The following statements taken from pages 79 to 85 of Reich's book indicate the essential nature of the orgasm.

> Erective and ejaculative potency are nothing but indispensable prerequisites for orgastic potency. Orgastic potency is the capacity for surrender to the flow of biological energy without any inhibition, the capacity for complete discharge of all dammed-up sexual excitation through involuntary pleasurable contractions of the body.
>
> The intensity of pleasure in the orgasm depends on the amount of sexual tension concentrated in the genital; the pleasure is all the more intense the greater in amount and the steeper the "drop" in the excitation.
>
> The orgastic excitation takes hold of the whole body and results in lively contractions of the whole body musculature. . . . What we call the release of tension . . . is predominantly the result of a flowing back of the excitation from the genital to the body.
>
> The complete flowing back of the excitation toward the whole body is what constitutes gratification.

Far from being an automatic response to a purely mechanical stimulation of an erogenous zone, sexual intercourse is a dynamic function which mobilizes all the available biological energy of the body. It is a fact, which the clinical investigations of sex-economy have long revealed, that only the full surrender to love in the sexual act, that is, complete identification with one's partner, can result in the orgasm reflex, the involuntary pleasurable contractions of the body with the concomitant sensation of intense gratification.

If Guyon is unaware of the nature of this phenomenon, he is only one of a very great number of individuals of whom this is, unfortunately, true. Prior to 1923, when Reich discovered the orgasm reflex, sexology and psychology knew only of erective and ejaculatory potency. The reason for Guyon's error is, therefore, not difficult to perceive.

There is, however, another side to the picture. For most persons the sexual act is a mechanical operation. The author has described a situation which really exists, only it is not a scientific view of sexuality. The mass neurosis which afflicts humanity is rightly attributed by Guyon to the suppression of sexuality, but again, the solution to the problem is not a mechanical sexuality with its resulting libertinism. Such a condition would create the very chaos which our present conventions aim to avoid. On the other hand, sex-economy is based upon a natural love life and the gratification of a healthy sexuality; that is, one in which the sexual act is the expression of a natural love impulse.

Let us consider some of the sexual acts for whose legitimacy Guyon so ardently argues. The author speaks of masturbation on page 304:

> Onanism is a very widely current method of obtaining sexual pleasure, for the term includes all mechanical means of procuring this pleasure otherwise than by coitus in the strict sense. . . . We may note too that, at bottom, coitus itself is a form of satisfaction which makes mechanical use for its own ends of the genital organs of another, whereas masturbation is a form of satisfaction which makes mechanical use of any other object. Mechanically there is no difference between the two methods: and sexually the pleasure may be the same in the two cases.

Of course, where coitus is a mechanical act, there is no difference between it and masturbation. There is a very great difference in the sexual pleasure when coitus results in the orgasm. The fact that masturbation is widespread among adults merely proves how common is the disturbance of orgastic potency. On the other hand, masturbation is not necessarily an aberration.

In childhood, masturbation serves a natural function of providing a means of satisfying the sexual need. In adolescence, it serves to bridge the gap to heterosexual intercourse. If unduly prolonged, however, it proves disappointing. For the healthy adult, it can never take the place of coitus because it does not offer the deep satisfaction of the orgasm. Recourse to masturbation under circumstances where a love partner of the opposite sex is unavailable is natural, otherwise the practice indicates a disturbance.

Homosexuality, too, is a fairly common practice, but this fact in no way supports the contention that this mode of satisfaction is on a par biologically with heterosexual intercourse. Guyon frequently relies upon statements of individuals that they derive as much pleasure from this relationship as they would from a heterosexual one to equate the two in terms of pleasure. Such subjective proofs are unreliable scientifically. One could as easily prove, by quoting a frigid person, that the sexual act is without pleasure entirely.

Is the tendency to homosexuality physiologically determined? Is inversion congenital? One may find instances of glandular disturbance among homosexuals, but this may be a result of the practice and not its cause. I have heard of no case of congenital inverson. One does find many instances, on the other hand, of this practice among individuals who have been segregated from the opposite sex for extended periods of time. Where the opportunity for heterosexual relations exist this practice is clearly an aberration. It is when we consider the moral aspects of homosexuality, that we must agree with Guyon that "those who do not happen to share it have no business to denounce it or to interfere with it."

This confusion between moral principles and scientific truths pervades the whole of this book. The moral justification of a sexual act in no way renders that act physiologically healthy and harmless. It is the same here as with the other physiological functions. If a person should choose to live on a liquid diet only, no

one would have the moral right to stop him, but it would be another matter entirely to regard his preference as a health diet.

The physiological error which invalidates the scientific principles of this book is the postulation of a mechanistic theory of sexuality. That simply does not accord with the biological facts. The author also commits a psychological error in equating adult sexuality with its infantile counterpart. Speaking of coprophilia, he says: "It is easy to see therefore that coprophilic satisfaction is at any rate not a new discovery of later life, but rather a return to an infantile form of attraction; and this shows it to be something much more natural than might at first have been supposed." If an adult suffers from enuresis, would this be considered more natural too?

The book reveals a methodological error which is all too common in some forms of sexological thinking. Does the fact that other cultures legitimatize various sexual acts transform them into healthy manifestations of the sexual impulse? Consider the following quotations:

> The law of the Koran, very well informed, like all Oriental documents, on the sexual psychology of children, authorized the marriage of girls at nine and of boys at twelve.
>
> Faithful observers as they were of the logical principles that we ourselves have adopted, neither the Greeks, the Romans, nor the Orientals ever regarded Sodomy or Lesbianism as other than perfectly normal and permissible varieties of pleasure.
>
> In Japan, which seems to be the only existing nation of the world which shows a little common sense in sexual matters, nudity is not shocking, as it is in the West.
>
> The Chinese and Japanese, for instance, are both kind and courteous in their dealings with prostitutes.

What kind of sexual health is shown by countries which favor prostitution and encourage the sale of daughters by their fathers? Japan with its ancestor worship and sadism is a poor example of common sense in sexual matters. Nor can we refer to the ancient Greeks and Romans who, despite their intellectual achievements, tolerated slavery. And certainly, the marriage of girls at nine years of age does not reveal an understanding of the sexual psychology of children. The book abounds with many other misconceptions which, unfortunately, we have not the time here to examine.

It is particularly important at this time, however, to distinguish between natural love and libertinism. Too frequently, it is assumed by biopathic individuals that they are synonymous and that sex-economy, which is against sexual suppression, is also against morality. If sex-economy is against a false, compulsive, morality which denies to people the possibility of real happiness and satisfaction in love and work, it is even more against an immorality which permits the living out of sexual desires motivated by secondary drives. A most timely warning is contained on page 197 of Volume 2 of the *International Journal of Sex-economy and Orgone-Research*.

A. Lowen.

Phillipson, Herbert: Education—A Search for New Principles. London: George Routledge & Sons, 1942.

This book is made outstanding by the clarity with which education is approached from the sociological standpoint. Its main weakness lies in the naiveté with which the author treats psychology as a more or less negligible adjunct in education. He says quite correctly that "there is not any factor in environment, or in the nature of man, which can be isolated and examined by itself. Man biological and man psychological cannot be separated." If the task of education is to be more than that of keeping the secondary, antisocial "nature" of man in check, then, indeed, the point of departure of any education must be "the interrelationship between man and his environment, wherein no factors or group of factors remain constant." A society based on free competition leads inevitably to egoism; the wage and profit system leads to the alienation from work. In this connection the author correctly criticizes the onesidedness of mere school reforms. In this way, he points out, the conflict between "moral training" and "social practice" is never solved, and the adjustment to reality ends in hypocrisy and neurosis. "For this is a society which attempts to train its children to enjoy all the possibilities that life now offers, yet safeguards the right to full enjoyment for a small minority of the population . . . in short it is a civilization bold enough and sufficiently hypocritical to persuade itself that its children can be taught to believe what their elders do not practice." The author points out that we should not again be content with a "patched-up system of education" which would mean condoning a "patched-up social structure." Rather, "we must build a new social system which will foster attitudes that bind men together, not tear them apart. The practical human relationships must not be dependent upon an economic system which breeds jealousy, discontent, hate and fear. They must be a part of an economic system which demands common effort, and which gains its motive power and irresistible strength for a common purpose. Under such an economic system, the basis of which has been defined, loyalty, self-sacrifice, confidence and comradeship develop a new quality."

With this "social tendency" of the author one could fully agree. But, in writing about the search for new principles in education, such sociological considerations can be no more than general prerequisites; one would like to hear more about the role of education in paving the way for such a new economic structure. Only few people have any realization of what a new kind of sexual education could achieve here, and, unfortunately, our author does not belong to them. There can be no doubt that if there are any "new principles" in this field they are to be looked for in sexual education. As things are today, however, one has to look not so much for the principles as for the educators who are willing to take the risk of applying them. What the author has to say on the subject in his chapter on The Nature of the Individual is disappointing. His discussion of Freud and Malinowski is so uncritical that one doubts the author's first-hand acquaintance with their writings. He does not explain what he means in stating "that Freud's nature of the unconscious, his id, his ego and his super ego are more or less local phenomena, dependent for their existence upon the peculiar environment of our times." Nor does the following show a critical evaluation of Freud's findings: "Our new society will have nothing to do with the attitudes of jealousy, hate and aggression which, Freud implies, help to make war inevitable and our children, bless their hearts, while enjoying all the affection of parent and society, will look upon Freud as a nasty ogre who said, 'The function of Education is to inhibit, forbid and repress'." This helplessness and ignorance is compensated by such beautiful and complacent sentences as the following: "The function of Education is not to inhibit, forbid and suppress. The function of Education shall be to guide and encourage, and the example of teacher and society as a whole, together with the active participation of the school in social life, shall lead our children from earliest years into a likeness and sympathy with the beauty of reason." This quotation from Plato's Republic hardly fits into the context of the book. Even where the

author correctly criticizes Freud's socio-ethnological theories he shows that he has no concrete concept of Freud's theories. Since, as far as I know, Malinowski was the first to formulate this ethnological criticism, it is all the more surprising to find the author say the following: "Malinowski, the anthropologist, falls into the same error [as Freud] and poor, inoffensive Trobrianders are endowed with all the blessings and social advantages of an Oedipus complex, the attendant repressions being carefully modified to fit in with the local social organization and marriage laws."

Other chapters of the book, such as the one on Philosophy and Fascism, and the discussions of practical pedagogical problems, however, are better organized and show a young and capable teacher at work. There is much critical material on the problem of "discipline" but the author, like others, leaves us in the dark concerning the ambiguity of "voluntary discipline." One could wish that the author would become acquainted with some sex-economic literature.

HARRY OBERMAYER.

LEVIN, DEANA: Children in Soviet Russia. London: Faber & Faber, 1942.

This book belongs to the category of the "Friends-of-Russia literature." The important thing about this category is not the fact that propaganda is being made and that only the good sides (in this case, of socialist school work) are emphasized, but the fact that difficulties of all kinds are left out of consideration. Such smooth pieces of reportage make it difficult for one to form an opinion. They seem to indicate that everything is almost ideal in Soviet Russian education.

In spite of all objective progress, the reading of this book leaves one with an uncomfortable feeling. It shows that even young pupils have a much too "objective" orientation toward life. The reader will often feel the way children from other countries did who visited the author's school. These children often felt that the eagerness to learn on the part of the Russian schoolchildren was mainly an attempt to please, and that they often were "telling tales." One wonders how the structure-formation of nine-year-olds is influenced by "socialistic contests," the semi-military character of the schools and the "pioneer movement." Under such conditions children no longer go for a walk in the woods but march in formation. One gets the creeps at the description of an eleven-year-old who, because of some minor misbehavior, stands before a committee hearing himself accused. How will he handle his guilt feelings when he is 30?

The deep-reaching changes in Sovietistic education as they have taken place during the past years are not discussed in the book. If co-education was so bad that it had to be abolished in 1943 one would expect that it showed its disadvantages also in the years between 1938 and 1942, the period in which the book took shape. Yet the author, although she had the rank of school inspector, has nothing to say on the subject. It seems that, in the country of the revolution, education has become a concern of the administration. To point out the new economic conditions for education is not enough. One would rightly expect something about the theoretical basis of this new kind of education. In the appendix to the book, we read the usual stuff by uninformed authors about "Puberty":

> Usually people are considered mature at the age of 20-22 or even later. . . . At that time the organism can be considered mature enough to fulfill the function of propagation. Propagation is one of the most basic functions of all living beings, including man. Sexual life is the manifestation of the instinct which contributes to the continuation of the species. But the behaviour of man is directed not by instincts, but by his consciousness which is determined by the social environment. We have to approach problems of sexual life consciously. We must remember that these problems are of the greatest importance for society. Soviet public opinion is fully interested in the correct solving of these problems. . . . An early beginning of sexual life is unhealthy from a physiological point of view. It wears out the organism prematurely. From a social point of view early sexual life is also harmful. It cannot bring a healthy posteriority, and makes people weak-willed and strangers to the spirit of collectivism. (Extracts from ANATOMY AND PHYSIOLOGY OF MAN, Moscow, 1934.)

The sex-inimical tendency here is obvious, expressed in pseudoscientific statements and moral valuations, the same as one has heard for a long time from the most reactionary sexologists. Every reader of this book should also read Reich's SEXUALITÄT IM KULTURKAMPF which demonstrates the irrational background of this kind of pseudoscience.

HARRY OBERMAYER.

PSYCHOANALYSIS TODAY. Edited by Sandor Lorand. New York: International University Press, 1944.

This book is heralded on the jacket as "The Modern Approach to Human Problems." A collection of essays by well-known authors in the psychoanalytic field, it is essentially descriptive and is arranged in six parts: 1. Medicine and Psychosomatics; 2. Education and Social Work; 3. Neuroses; 4. Psychoses; 5. Problems of Therapy; 6. Applied Psychoanalysis.

A reader approaching this volume will want to know whether there is a consistent body of theory which underlies this modern approach to human problems; what the implications of this theory are for therapy, prevention, and insight into related fields of knowledge. Secondarily, it may be of interest to the reader to observe the current status of the profession of psychoanalysis as revealed in this book.

The status of psychoanalysis as a movement is more immediately apparent than its theoretical base.

> After half a century psychoanalysis is still a young science, but it has invaded every branch of modern life and thought; and today is one of the most powerful influences affecting our social structure.

This statement from the editor's introduction is supported by the impression the entire volume gives, a correct one, that psychoanalysis has gained recognition and status as a body of knowledge and as a profession. In the light of the struggles for acceptance which marked the early years of Freud's work there may be satisfaction on the part of some that these days are over, but recognition as a "respectable" discipline has not been without cost, as an examination of the theoretical base and its implications will show; a cost of which the contributors often seem vaguely and uneasily aware. It is appropriate to ask, 1) In what way has psychoanalysis invaded every branch of modern life and thought? and 2), What is the nature of this powerful influence on the social structure? This review will attempt to answer these questions.

In looking for a common core of theory which dominates psychoanalytic thought and practice as represented in this volume, one finds a schema essentially unchanged from the later writings of Freud. Two major points stand out which are subject to challenge. The first is the uncritical acceptance of the current conditions of society with the patriarchal family as the immutable norm, "the reality principle" to which individual behavior must be adapted. Oberndorf expresses this in his article on "The Child-Parent Relationship":

> The father role, usually recognized in the family as the power behind the

> mother, is more difficult to replace in the artificial nursery substitute for the home. Freud and Burlingham point out that it is the father's function "to impersonate for the growing infant the restrictive demands inherent in the code of every civilized society."

A class structure as well as a paternalistic society is equally taken for granted, and by implication valued, by Oberndorf and others here represented:

> If the child had a choice, he probably would prefer a "good" parent with some weaknesses which tended to make his own shortcomings less glaring by comparison, rather than a "perfect" one so far removed as to seem unrelated to him. Particularly *for this reason* children are apt to seek the kitchen or servants' quarters in leisure moments, and boys like to pass time with the farm-hand or the chauffeur where a critique of their faults by adults is less severe and the *general level of conduct lower* (italics the reviewer's).

The second point in the theory here represented which invites criticism is the postulate of a life-negating death instinct, co-existent with and of the same nature as the life instinct. Melanie Klein, in the "Early Development of Conscience in the Child," writes:

> At the outset of the life of the human organism, the instinct of aggression, or death instinct, is being opposed and bound down by the libido, or life instinct, the eros. A fusion of the two instincts ensues and gives rise to sadism.

The essays in the volume bear out the consequences of these theoretic positions for both theory and practice. In theory the effect has been to by-pass the problem of sexuality, letting it rest with the limited recognition of infantile sexuality, and failing to question further the nature of sexuality itself, or to distinguish between its primary nature and its reactive secondary manifestations in the face of societal suppression. The concepts "pleasure" and "reality" are limited to a subjective ideational approach.

"Reality" and "pleasure" are not necessarily in conflict with one another once the morally defended vested interests of contemporary life are challenged. The reality principle then is seen as practical and decent arrangements for people living and working together. Infants whose rights have been respected will quickly understand the rights of others as they are given opportunity to play with children of their own age group, or to mix with adults in a spontaneous atmosphere devoid of overstimulation and irrational demands on the part of adults. They will form their natural play groups, which in functioning adult life will be natural work groups. "Pleasure," on the other hand, need not be seen as something surrendered for reality, or postponed, or sublimated. Pleasure, if understood in terms of biological functioning, consists of the expansion of the organism, of which the prototype is the expansiveness of sexual functioning, with its climaxing discharge of biological energy; and in its accruing phases expressing itself as normal aggression, going-toward persons and objects; in its ebb, the comfortable withdrawal into self for the accumulation of new reserve. In other words, pleasure equals living functioning of the total organism in all phases, spontaneously, according to self-regulatory needs. Then the only framework society needs to supply is that offering opportunities for privacy, and for working and playing with others.

Two characteristic approaches to sexuality in the present volume should be pointed out, since they reveal the limitations of the contemporary psychoanalytic point of view. Jelliffe writes:

> The chief goal, purpose, pattern or wish of conduct . . . or behavior, is the continuance of life. In the lower forms of life—bacteria and certain protozoa—and in certain higher forms, as in many plants, the action pattern is carried on by a *non-sexual process* (italics the reviewer's).

To anyone who has observed the orgasm reflex in protozoa, a concept of sexuality which is confined to mating for propagation of differentiated sexes no longer has any meaning except in the history of ideas.

Brill, contributing an article on "Sexuality and its Role in the Neuroses," starts off by calling attention to the fundamental bisexuality of the human species, with citations from Greek mythology and descriptions from Krafft-Ebing. This searching for the essential similarity of sexual nature in both men and women can only find a satisfactory solution in Reich's orgasm theory in which it is recognized that in their basic sexual functioning, namely, the orgastic discharge of biological energy, the male and female of the human species are exactly alike.

Having by-passed any further exploration of sexuality, which one might interpret as their own surrender to suppressive forces of modern society, the theoretical minds among the psychoanalysts have turned to either an elaboration of methodology in the exploration of specific problems, or to the development of the "ego-psychology." Franz Alexander writes in "Development of the Ego-Psychology":

> From 1921 on we can speak of the evolution of a new analytic ego-psychology. A deeper investigation of the fundamental processes of repression was the starting point of this new development. The central problem became: which psychic factors are responsible for repression and how does this process take place in detail? It soon became evident that fear is the motive power behind all repression. Characteristic of this fear, however, is the fact that it is by no means a rational or entirely conscious fear of external and actual danger, but an inner fear which appears in consciousness as a guilty conscience. This phenomenon is most satisfactorily described by saying that one part of the personality exhibits fear of another part, which in ordinary language is called conscience, and that repression serves to avert this fear reaction.

An examination of the mechanisms of repression, of the way in which outside prohibitions become internalized, could hardly be called a true theoretic contribution unless it is related to its dynamic place in the process of human functioning. Thus, understanding of repression and of internalization may serve either to further or to hinder human functioning, and this relationship needs to be shown. An individual might either use his insight into the ways in which his self-prohibitions have developed to free himself from the burden of their compulsive moral character and view limitations simply on a practical and rational basis, recognizing that conditions can, even if slowly, be changed; or his insight might contribute to his resigned acceptance of the necessity of repression. From the point of view of the person accepting and valuing the current social structure and fearing the "instinctual" destructive drives in man, resignation is the only choice, as freedom seems too dangerous. Alexander makes his point of view quite clear when he states:

> If an internal code of law such as the super-ego or, to use the more popular expression, the conscience, were not present, social order could only be secured by assigning to every citizen a policeman to make him conform with accepted social behavior.

Let us see how the theoretical points which we have criticized affect education, treatment, prevention, and the relationship to other fields of knowledge. Brill, proceeding from the theory of destructive aggression, claims that:

Through continuous training the little boy is made to feel with his fellow beings: he is *forced* (italics the reviewer's) to identify himself with his neighbor's suffering. I recall a little boy who took great pleasure in throwing out of his crib a toy dog and then screaming continuously until it was returned to him. This toy dog could be made to bark through hand pressure, of which the little fellow was as yet incapable, but when he threw it out of his crib the impact of the fall made it bark. When he suddenly discovered this, he repeated the process over and over again to the annoyance of his parents, who were forced to pick it up for him. When he grew older and began to walk, he would do the same thing to his mother's pet Pomeranian. His greatest pleasure was to throw the dog off his chair so as to make it yelp, and despite repeated admonitions, he repeated it whenever possible. This mischievous action gave him great pleasure because it made him conscious of his power. His mother loved her pet. Consequently, she often chided him for maltreating it. She even strove to instill in her little boy a love for dogs; she would often say, "Pet the doggie, nice little doggie," all of which was of no avail. One day when he again abused the dog the mother lost her patience and knocked him down, saying, "What you do to the dog, I will do to you." The little fellow cried his heart out, but the mother tells me that he never abused her pet again; in fact, he now loves the dog, who is his constant companion. By her act of violence the mother actually forced the child to "feel with" or to empathize himself into the dog, and thus erected a dam against his primitive cruelty.

Any healthy person dealing with children would recognize at once in this case that a mother who would knock down her child to protect her dog was neurotically incapable of real affection for her child and had displaced it to her pet. In the opinion of this writer, the child had already sensed this when he threw down the toy dog from his crib. Even if this interpretation were not correct the entire situation could have been handled appropriately earlier. The attachment to the dog, which was thus forced upon the child, can only be an early beginning of a cowed, submissive, masochistic attitude of alliance with others, neurotically dishonest and with strong hostile feelings toward objects underlying it.

Melanie Klein, in the article already cited, points out the dilemma of psychoanalytic treatment in dealing with the character formation imposed by contemporary education:

> As far as actual experience goes, we know that in analyzing the pre-genital libidinal fixations we can only succeed in converting a certain amount of the libidinal quantities involved into genital libido, even in favorable circumstances, and that the remainder, and no unimportant remainder, continues to be operative as pre-genital libido and sadism; although, since the genital level has now more firmly established its supremacy, it can be better dealt with by the ego, either by receiving satisfaction, *or by being kept down, or by undergoing modification or sublimation* (italics the reviewer's).

This quotation expresses the point of view of much contemporary psychoanalytic treatment. Without a concept of genital health, or an understanding of the effect of sexual stasis and orgastic impotence in maintaining neurotic illness and its inevitable concomitant of destructiveness, satisfaction or "being kept down" or "undergoing modification" or "sublimation" are viewed as equal choices for expression at the genital level. Analysis sees the patient's getting well, and his becoming resigned to feeling guiltlessly comfortable with his neurosis, as equal goals of therapy.

The approach to prevention is also conspicuously colored by the acceptance of the institutions of modern life. Only one article in the book can definitely be classed as related to this question, that by Ames on "Prevention of Mental Disease in Childhood." This is, in the reviewer's opinion, the soundest article in the volume. He writes a simple and sensible paper on child training which, though incomplete and far from radical, upholds the ideal of "naturalness and decency" in all physiological processes, and stresses the importance of having persons with this "naturalness and decency" the only ones to be put in charge of children. There is nothing here about "higher" and "lower" standards of conduct. Two other articles which may be considered on the lines of prevention are Kenworthy's on "Psychoanalytical Social Work," and Eisenbud's on "Mental Hygiene." Descriptive in character, they nevertheless call attention to many types of adjustments which can be effected by individuals, social service agencies, and the public through a psychiatric orientation to human behavior. Insofar as this orientation is correct, social workers, and individuals and groups, can do much to alleviate pressures and partially salvage individuals who fall on to the community for care. This is at best patchwork, and neither social work nor public education in mental hygiene concepts can achieve effective changes as long as the interpretation of the nature of human beings and the role of society is accepted in the terms of contemporary psychoanalytic theory; and as long as social control through the professions as well as other economic vested interests is in the hands of the fearful and the resigned.

More characteristic of the helplessness before the problem of prevention are three attitudes:

Broadwin in the article on "Juvenile Delinquency" is clear in stating that "the problem of juvenile delinquency is to be laid at the door of society," but his only recommendations for prevention lie in psychoanalytic treatment, improved corrective schools, and a vague reiteration that sociological and economic factors are in the end of paramount importance.

Schilder, writing on "Problems of Crime," is in an even worse dilemma. Convinced that "the wild, destructive impulses" need to be held down through fear by an externally established order, he can only make a plea for greater individual tolerance for criminal behavior in the light of our understanding of the dynamics of such behavior.

Melanie Klein comes to the logical conclusion of the point of view underlying the whole volume, namely, that "individual psychotherapy alone can help the individual to solve the conflicts that *are in his nature*" (italics the reviewer's), and she concludes with a plea that "child analysis become a part of every child's education."

How, then, has psychoanalysis influenced other branches of modern life and thought? The editor uses the term "invaded" and it is a correct one. Hartmann, in "Psychoanalysis and Sociology," writes:

> Human conduct is oriented to its environment, and the psychoanalytical approach includes the structure of reality in its description. This is especially clear in Freud's last version of his theory of anxiety which relates the internal danger to the external one, and in Anna Freud's description of types of defense which the child develops against the discomforts and dangers which threaten him from the outside world. . . .
>
> We are, therefore, primarily concerned with the question: In what manner and to what degree does a given social structure bring to the surface, provoke or reinforce certain instinctual tendencies or certain sublimations, for instance? On the other hand, the way in which different social structures facilitate the solution of certain psychic conflicts by a participation —by action or in phantasy—with the

given social realities, merits special investigation.

The special investigation to which Hartmann refers is being carried on by some psychoanalysts. Thus there have recently been psychoanalytic interpretations for the U. S. Government of such things as "Japanese" character, or of "Balinese" character. This sort of "typological" thinking is most unfortunate, and its effect in practical strategy and in the public mind seems but a repetition of the propaganda devices of Nazi Germany with regard to other peoples. Any correlation between a theory of individual behavior and of group life must recognize the converse side of the problem, namely, the dynamics of change within a given social frame and the implicit possibilities and necessities for social reorganization. Thus an industrial society in Japan or Europe or the United States brings conditions of life and possibilities of life which cannot be equated with concepts of character types derived from historical studies of social structures viewed as static "reality." Any approach to other fields of knowledge cannot be an invasion. In any case the approach should be not to fields but to problems, in which whatever is true from any of our academically channelized areas of investigation is used.

This approach to common problems is somewhat better indicated in the articles on psychosomatic medicine in which doctor and analyst proceed parallelwise along the same road with friendly bows to one another. Here the difficulties are of a different nature. Since doctors and analysts cannot come together on a common acceptance of what is health, they are still preoccupied, in their different ways, with the removal of symptoms. Thus, English writes:

> It behooves the psychoanalyst, the psychiatrist, the general practitioner and the specialist in fields other than psychiatry to join hands and work with one another in helping sick people to learn that the most common-sense mind on the surface has hidden recesses in which childish bizarre ideas lie hidden in the matrix of emotion which can furnish the "toxin" for pain, discomfort and disability.

Following this, with the recognition that the basis of illness lies in "the instinctual demands clamouring for expression," English can only propose that doctors in medical schools should be made more aware of the problem; that psychoanalytic therapy should be more available to people with psychosomatic disorders; and that analysts should not be caught up in the tempo of the times in attempting to shorten treatment.

A third type of relationship to other fields warrants attention apropos of the article by Ernest Jones on the "Psychology of Religion." Restating the psychoanalytic approach to religion, Jones writes:

> The attributes of omnipotence, omniscience, and moral perfection are invariably ascribed to the father at one stage or another during the young child's growth; they proceed at least as much from internal necessities as from any external example or suggestion. Various repressions to do with the idea of the father, together with his obvious shortcomings when judged by so absolute a standard, lead to the attributes of perfection being abstracted from him and incorporated in an intangible figure. This, in a couple of words, is perhaps the gist of the mass of knowledge we possess about the development of the idea of Godhead.

Analyzing this further, Jones presents the contradictory elements which make up contemporary religions. Seeing man as of a double nature, both life-affirming and life-negating, he sees man's creation, religion, also as both positive and cruel, and continuously in conflict within itself. After this analysis, however, he concludes with a little bow to the religionists:

> To estimate the obviously enormous part that religion has played in organizing the capacity for sublimation on the part of mankind, and thus raising its cultural *niveau*, is a task for others to fulfill.

Thus, despite his understanding of the mechanisms by which religion was created, Jones values it and opens the way for the remarkable phenomenon we are witnessing at the present time, of increasing cooperation between the clergy and psychoanalysts.

Finally, what is the nature of the "powerful influence" of the psychoanalytic movement on the entire social structure? Who is not for freedom is against it, and we see psychoanalysis set to become the handmaiden of reaction. The unwillingness to risk social criticism is rationalized in a number of ways. For those who value "cultural achievements" the importance of sublimation is justified. For example, Ernst Kris points out:

> Sublimation . . . describes the social aspect of the process of the discharge of energy: an instinctual drive which tends to a goal disapproved by society, and by the individual's superego, may be redirected towards an approved goal. Artistic activity offers opportunities for sublimation of impulses of various kinds. . . . Clinical experience . . . confirms an impression shared by all who have studied art and artists: distance from immediate gratification is a pre-condition of any aesthetic experience.

Many might challenge Kris' interpretation of "aesthetic experience" or his discussion of the precondition of "productive madness." It is significant that none of the discussions of the arts in this volume include music, or folk arts, or examine the neurotic character, or class character, of our aesthetic standards.

A second rationalization of a suppressive society is that offered by those who fear the chaos of unleashed destructive drives. Thus Schilder writes:

> The wild instincts of one individual would endanger his fellow-beings, and their reaction to his aggressive and *untamed sexuality would make enjoyment of life utterly impossible* (italics the reviewer's).

The effect of these values and fears has not only made psychoanalysis available as a tool for suppressive measures, but has also impaired the development in psychoanalytic thought itself. We see a turning in on itself, a fear to reach out to new problems. Until psychoanalysis can re-examine its theoretical base, however, it cannot move on to the major problems of our time: the positive problems of health, that is, of non-pathological living functioning, with its non-compulsive expression in individual and group life, in work, and in love.

GLADYS MEYER.

EXCERPTS FROM

A. S. NEILL'S "THAT DREADFUL SCHOOL"*

HISTORICAL

This is the story of a modern school, Summerhill, a school that is fairly well known and one that is pretty widely talked about. Every now and then I hear wonderful stories about it. The latest is that I had a child of seven whose main interest in life was water-closets. I decided to cure this child by drastic means, so I shut him up alone in a W.C. for twelve hours, during all of which he screamed and . . . was of course cured for ever. Then there are tales of myself—that I am a drunkard, a homosexual, a Communist, a red-haired rude Scot. Again there are tales of Summerhill's being a home for imbeciles . . . Less fatuous stories tell of a school where children break windows all day long . . . Newspaper reports call it a Go-as-you-please School, and imply that it is a gathering of wild primitives who know no law and have no manners.

It seems necessary, therefore, for me to write the story of the school as honestly as I can. That I write with a bias is natural, yet I shall try to show its demerits as well as its merits. And possibly I shall find that its demerits are only my own inner limitations transferred to my work. Its merits will be the merits of healthy, free children whose lives are unspoiled by fear and hate.

Summerhill began as an experimental school. It is no longer such; it is now a demonstration school, for it demonstrates that freedom works and succeeds. When my wife and I began it we had one main idea: to make the school fit the child instead of making the child fit the school. I had taught in ordinary schools for many years, and knew the other way well, knew that it was all wrong. It was wrong because it was based on an adult conception of what a child should be and what he should learn. It dated—and dates—from the days when psychology was an unknown science. Obviously a school that makes active children sit at desks studying mostly useless subjects is a bad school when we consider the psychology of the child. It is a good school if we agree that it is desirable to have a population of docile, uncreative citizens who will fit into a civilization whose standard of success is riches and whose average of living is wage-slavery. The trouble is that while one stage of civilization passes, child nature continues. Our idea in founding the school was to find out what this child nature was.

There were—there are difficulties. We could only study children from the upper and middle classes, because our whole scheme depended on our being able to make ends meet . . . Sometimes it is difficult to see child nature when it is hidden behind too much money and too expensive clothes. When a girl knows that on her twenty-first birthday she will come into £500 a year it is not easy to study child nature in her. Luckily, however, most of the present and past pupils of Summerhill have not been spoiled by wealth; most of them know that they must earn a living when they leave school.

One drawback about the children of the middle-class is that they too are often given too much money . . . At our general meetings in school I have more than once advocated the pooling of all pocket-money, saying that it is manifestly unfair that one boy should get a pound a week while others get sixpence. In spite of the fact that the pupils with the big incomes are always in a very small minority I have never had my proposals carried by general vote. Children with fivepence a week will defend hotly any proposal to limit the income of their richer neighbors. And when one gets up and points out that Neill has a car while none of the staff can afford a car I know that I must be a bit of a humbug. Children have a very strong sense of justice, a fact that will be shown more fully when I describe their methods of dealing with social offenders.

I must explain that children who come to school early—say, at three or even eight, never show bourgeois tendencies; it is the spoilt child of fourteen from the conventional school that is the trouble.

At one time many of the children were problems: thieves, truants, etc. That came about because we were practically the only school that would deal with such cases. But gradually we began to have normal children, so that today among our seventy pupils the proportion of problems is, I should guess, the same as obtains in Eton or Roedean.

Well, we set out to make a school in which we should allow children freedom to be themselves. In order to do this we had to renounce all discipline, all direction, all suggestion, all moral training, all religious instruction. We have been called brave, but it did not require courage; all it required was what we had—a complete belief in the child as a good not an evil being. And during sixteen years this belief in the goodness of the child has never wavered; rather has it become a final faith.

Today, Summerhill pupils are mostly children whose parents want them to be brought up without restricting discipline from above. That is a most happy circumstance, for in the old days I would have the son of a fire-eating diehard, who sent his lad to me in desperation. Such parents had no interest in freedom for children at all, and secretly must have considered us a crowd of lunatic cranks. It was so very difficult to explain things to those diehards.

I recall the military gentleman who thought of enrolling his nine year old son as a pupil.

"The place seems all right," he said, "but I have one fear . . . my boy may learn to masturbate here."

I asked him why he feared. "It will do him so much harm," he said.

"It didn't do you or me much harm, did it?" I said pleasantly.

He went off rather hurriedly with his son.

Then there was the rich mother who, after asking me questions for an hour, turned to her husband and said, "I can't decide whether to send Marjorie here or not."

"Don't bother," I said. "I have decided for you. I'm not taking her."

I had to explain to her what I meant. "You don't really believe in freedom," I said. "If Marjorie came here I should waste half my life explaining to you what it was all about, and in the end you wouldn't be convinced. The result would be disastrous for Marjorie, for she would be perpetually faced with the awful doubt: which is right, home or school?"

The ideal parents are those who come down and say: "Summerhill is the place for our kids; no other school will do." No other school will do because we have gone farther than any other school in freedom (with the possible exception of Dora Russell's school).

It is necessary even at this late date to explain what is meant by freedom for the child. The usual argument against freedom for children is of this kind: Life is hard, and we must train the children so that they will fit into life later on. We must therefore discipline them. If we allow them to do what they like how will they ever be able to serve under a boss? How will they compete with others who

* London: Herbert Jenkins Limited, 1937.

have known discipline? I shall leave the answer till later: perhaps the book will be a sufficient answer.

Freedom is necessary for the child because only under freedom can he grow in his natural way. I see the results of bondage in new pupils coming from prep. schools and convents. They are bundles of insincerity, with an unreal politeness and pseudo-manners. Their reaction to freedom is rapid and tiresome. For the first week or two they open doors for the staff, call me "Sir," wash carefully. They glance at me with "respect" which is easily recognized as fear. After a few weeks of freedom they show what they are. They become impudent, unmannerly, unwashed. They do all the things they have been forbidden to do in the past: they swear and smoke and break things. And all the time they have an insincere expression in their eyes and in their voices. It takes at least six months for them to lose their insincerity. They lose also their deference to what they think is authority, and in six months they are natural, healthy kids who say what they think without cheek or hate.

When a child comes young enough to freedom he does not go through the stage of insincerity and acting. The most striking thing about Summerhill is the absolute sincerity among the pupils . . . but I grant that it has its awkward moments, as when recently a girl of three looked at a bearded visitor and said, "I don't think I like your face." The visitor rose to the occasion. "But I like yours," he said, and Mary smiled.

No, I won't argue for freedom for children. One-half hour with a free child is more convincing than a book of arguments. Seeing is believing. Yet it is necessary to point out the difference between freedom and licence. The other day I sat with Ethel Mannin in Covent Garden. During the first ballet a child in front of us talked loudly to her father. At the end of the ballet Ethel and I found other seats. Said Ethel to me: "What would you do if one of your kids from Summerhill did that?"

"Tell it to shut up," I said. "You wouldn't need to," said Ethel; "they wouldn't do it."

And I don't think they would. I forget whether in any previous book I told of the woman who brought her girl of seven to see me. "Mr. Neill," she said, "I have read every line you have written, and even before Daphne was born I had decided to bring her up exactly on your lines." I glanced at Daphne who was standing on my grand piano with her heavy shoes on. She made a leap for the sofa and nearly went through the springs. "You see how natural she is," said the mother, "the Neillian child."

I fear that I blushed. It is the distinction between freedom and licence that many parents cannot grasp. In the disciplined home the children have no rights, and in the spoiled home they have all the rights. The proper home is one in which children and adults have equal rights. No one is allowed to walk on my grand piano, and I am not allowed to borrow a boy's cycle without his permission. At a general meeting the vote of a child of six counts for as much as my vote does.

But, says the knowing one, in practice of course the voices of the grown-ups count. Doesn't the child of six wait to see how you vote before he raises his hand?. I wish he sometimes would, for many of my proposals are lost. Free children are not easily influenced. The absence of fear accounts for this phenomenon, and the absence of fear is the finest thing that can happen to a child's life. They do not fear our staff. One of the school rules is that after ten o'clock there shall be quietness on the upper corridor. One night about eleven a pillow fight was going on, and I left my desk where I was writing to protest against the row. As I got upstairs there was a scurrying of feet and the corridor was empty and quiet.

Suddenly I heard a disappointed voice say: "Humph, it's only Neill," and the fun at once began again. When I explained that I was trying to write a book downstairs they at once agreed to chuck the noise. Their scurrying came from the suspicion that their bedtime officer (one of their own age) was on their track.

I emphasize the importance of this absence of fear of adults. A child of nine will come and tell me he has broken a window with a ball. There was a time not so long ago when the government resigned, and no one would stand for election. I seized the opportunity of putting up a notice: In the absence of a government I herewith declare myself Dictator. Heil Neill! Soon there were mutterings, and in the afternoon Vivien, aged six, came to me and said: "Neill, I've broken a window in the gym." I waved him away. "Don't bother me with little things like that," I said, and he went.

A little later he came back and said he had broken two windows. By this time I was curious and asked him what the great idea was. "I don't like Dictators," he said, "and I don't like going without my grub." (I discovered later that the opposition to dictatorship had tried to take it out of the cook, who promptly shut up the kitchen and went home.)

"Well," I asked, "what are you going to do about it?"

"Break more windows," he said doggedly.

"Carry on," I said, and he carried on. When he returned he announced that he had broken seventeen windows.

"But mind," he said earnestly, "I'm going to pay for them."

"How?"

"Out of my pocket money. How long will it take me?"

I did a rapid calculation. "About ten years," I said.

He looked glum for a minute, then I saw his face light up. "Gee," he cried, "I don't have to pay for them at all."

"But what about the Private Property rule?" I asked. "The windows are my private property."

"I know that, but there isn't any Private Property rule now. There isn't any government and the government makes the rules."

It may have been my expression that made him add: "But all the same I'll pay for them." In lecturing in London shortly afterwards I told the story, and at the end of my talk a young man came up and handed me a pound note "to pay for the young devil's windows." That is two years ago, but even now Vivien tells people of his windows and of the man who paid for them: "He must have been a terrible fool, because he never even saw me."

Most lying on the part of children is prompted by fear, and when fear is absent lying diminishes. I do not say it disappears entirely. A boy will tell you he has broken a window but he will not tell you he has raided the larder or pinched his neighbor's cycle valve. The complete absence of lying would be too much to hope for. I am a pretty good liar myself on occasion, and so are you, reader. I am writing this book on a ship on my way to lecture in South Africa, and I fear I have used—or rather abused—this trip generously these last few weeks . . . "Dear Sir, I regret that I cannot answer your letter in full because I am sailing for South Africa tomorrow," and what a great opportunity when I return! . . . "Dear Sir, I cannot trace your letter. It must have gone astray when I was in South Africa."

Freedom will not do away with the phantasy lie in children. Too often parents make a mountain out of this agreeable moleheap. When little Jimmy came to me saying that his Daddy had sent him a real Rolls Bentley I said to him: "I

know. I saw it at the front door. Topping car."

"Go on," he said, "I was only kidding."

Now it may seem paradoxical and illogical, but I make a distinction between lying and being dishonest. You can be honest and yet a liar, that is, you can be honest about the big things in life although sometimes dishonest about the lesser things. Thus many of our lies are meant to save others pain. Truth-telling would become an evil if it impelled me to write: "Dear Sir, your letter was so long and dull that I could not be bothered reading it all," or if it forced you to say: "Thank you for playing, but you murdered that Etude." Adult lying is altruistic (not always), but child lying is always local and personal. The best way to make a child a liar for life is to teach it to speak the truth and nothing but the truth.

Speaking a lie is a minor frailty. Living a lie is a major calamity. The children brought up under discipline live one long life lie. They never dare be themselves. They become slaves to established futile customs and manners, and they accept without question their silly little silk hats and Eton jackets, their "crocodiles" and their black stockings and straw hats. The Old School Tie symbolizes all that discipline stands for. The headmaster of a large boys' school said to me not long ago when I asked him what sort of boys he had: "The sort that goes out with neither ideals nor ideas. They would join up as cannon fodder in any war, never stopping to consider what the war was about and why they were fighting." That hints at the benefits of discipline to the ruling classes, doesn't it?

This business of being sincere in life and to life is a vital one. It is the most vital one in the world really . . . Possibly the greatest discovery we have made in Summerhill is that a child is born a sincere creature. We set out to leave children alone so that we might discover what they were. It is the only possible way of dealing with children, and the pioneer school of the future must pursue this way if it is to contribute to child knowledge and, more important, to child happiness. The aim of life is happiness. The evil of life is all that limits or destroys happiness. Summerhill is possibly the happiest school in the world. We have no truants and seldom a case of homesickness. We have no fights—quarrels, of course, but seldom have I seen a stand-up fight like the ones we used to have as boys. I seldom hear a child cry, and that is because children when free have much less hate to express than children who are down-trodden. Hate breeds hate, and love breeds love. Love means being on the side of approving, and that is essential in any school. You can't be "on the side of" if you punish and storm and rage. Summerhill is a school in which the child knows that he is approved of. Mind you, I make no claim that we are above and beyond human foibles. I spent weeks planting potatoes in Spring, and when I found eight plants pulled up in June I made a big fuss. Yet there was a difference between my fuss and that of an authoritarian. My fuss was about potatoes, but the fuss a disciplinarian would make would drag in the question of morality—right or wrong. I did not say that it was wrong to steal my spuds; I did not make it a matter of good and evil; I made it a matter of spuds. They were my spuds and they should have been left alone. I doubt if I am making the distinction clear. Let me put it in another way. To the children I am no authority to be feared. I am their equal, and the row I kick up about my spuds has no more significance to them than the row a boy may kick up about his punctured bicycle. It is quite safe to have a row with a child, when you are equals. Now some will say: "That's all bunk. There can't be equality. Neill is the boss; he is bigger and wiser." That is indeed true. I am the boss, and if the house went on fire the children would run to me. They know that I am bigger and wiser (am I?), but that does not matter when I meet them on their own ground—the potato patch, so to speak. When Billy, aged five, told me to get out of his birthday party because I hadn't been invited, I went at once without hesitation, just as Billy gets out of my room when I don't want his company. It is not easy to describe this relationship between teacher and child, but every visitor to Summerhill will know what I mean when I say that the relationship is ideal. One sees it in the attitudes to the staff in general. Corkhill the Chemistry man is "Corks" or "George." Other members of the staff are known as May and Cyril and Lucy and Ruth. Strangely enough the only person they have kept a title for is my wife, who is "Mrs. Lins" (Lindesay-Neill). I am "Neill," and the cook is "Maisie."

Visitors tell me that they find the children unusually friendly. They may be just as friendly at other schools, yet I recall the time when I was Joint Editor (with Beatrice Ensor) of *The New Era* round about 1919. Part of my work was to visit progressive schools, and I remember the difficulty I had in making contact with the children. They were standoffish, rather like the people on this ship who are just beginning to thaw on the seventh day out. The only children who accepted me at once were the boys in Norman MacMunn's school then at Tiptree Hall. That may have been because Norman did all his teaching with a cigarette in his mouth. Today Summerhill is possibly the only school in Britain where the teachers can smoke while they teach.

Children make contact with strangers more easily when fear is unknown to them. English reserve is at bottom fear, and that is why the most reserved are those who have the most wealth. If I had traveled Third on this ship I should have found the people much more friendly, but as a bad sailor I chose First, and as a good Scot I chose First—paid by the Transvaal Teachers' Association. If you really want to know the difference between the reserve due to class and the unreserve due to having no class, visit Harrow one day and an L.C.C. East End school the next. The fact that Summerhill children are as friendly as East Ham children is a source of pride to me and my staff.

It must be confessed, however, that many of our visitors are people of interest to the children. The kind of visitor most unwelcome to them is the teacher, especially the earnest teacher, who wants to see their drawing and written work. The most welcome visitor is he or she who has good tales to tell—of adventure and travel or, best of all, of aviation. A boxer or a good tennis player is surrounded at once, but visitors of theory, be it Communism or Oxford Groupism, are left severely alone.

It is worth mentioning that a free education does not produce Communists and rebels generally. It may be due to the class of pupils—they have never had to experience slavery or poverty—but more likely it is due to child nature itself. Childhood is playhood, and the play period lives longer than is generally supposed. Interest in politics is an adult interest. It comes to this that children live for the day. Tomorrow is too far away to be of importance to them. That is why time is long in childhood. When you are ten, a year is a long, long time, but when you are fifty the years pass at an alarming speed.

This playhood business has worried me a lot. I find it impossible to get youths of seventeen to help me plant potatoes or weed onions. They will spend hours decoking motor engines or washing cars or making radio sets, but anything to do

with weeding or shovelling sand is far away from their interest. It took me a long time to accept this phenomenon. "The lazy louts—when I was their age, etc. . . ." The truth began to dawn on me when one day I was digging my brother's garden in Scotland. I didn't enjoy the job, and it came to me suddenly that what was wrong was that I was digging a garden that meant nothing to me. And my garden means nothing to boys, whereas their motor bikes mean a lot. True altruism is a long time in coming, and it never loses its factor of selfishness.

Small children have quite a different attitude to work. Summerhill juniors, from three to eight, will work like Trojans mixing cement or carting sand or cleaning bricks, and work with no thought of reward. They identify themselves with grown-ups and their work is a play phantasy worked out in reality. From the age of eight or nine until nineteen or twenty the desire to do manual labor of a dull kind seems to be wanting. I speak of the masses; individuals remain workers right through this fallow period.

Small children live a life of phantasy, but they carry it over into action. The phantasy life persists in adolescence, but action is less common. Boys of eight to fourteen certainly carry their phantasies into action, for if they aren't playing gangsters and bumping people off they are flying all the skies in their wooden aeroplanes. From fourteen onwards the fallow period is most apparent, both in boys and girls. Small girls go through a gangster age also, but it does not take the form of guns and swords. It is more personal. Mary's gang objects to Nellie's gang, and there are rows and hard words. Boys' rival gangs are play enemies, while girls' gangs are more apt to be real enemies. This makes small boys more easy to live with than small girls. The boys are primarily interested in things, the girls in people. On a good day you may not see the boy gangsters of Summerhill. They are in far corners intent on their deeds of derring do. But you will see the girls. They are in or near the house, and never far away from the grown-ups. But you will often find the art room full of girls painting and making bright things with fabrics. In the main I think that the small boys are more creative, at least I never hear a boy say he is bored because he doesn't know what to do, whereas I sometimes hear girls say it.

I possibly find the boys more creative than the girls because the school may be better equipped for boys than for girls. Girls of ten and over have little use for a workshop with iron and wood; they have no desire to tinker with motorcycle engines, nor are they attracted by electricity or radio. They have their art work, which includes pottery, linoleum cutting, painting, sewing work, but that is not enough. They need a better cooking outfit than they have (although boys are just as keen on cooking as girls are). The girls need—now, really, what do they need? As a mere man I don't know. I see them writing and producing their own plays, making their own dresses and scenery . . . Branwyn, aged nine, produces excellent ballets, and the acting talent of the girls is of a high standard. The girls appear to frequent the chemistry lab. just as often as the boys do, and when I come to think of it, the workshop is about the only department that does not attract girls from nine upwards. The girls take a less active part in school meetings than the boys do, and I have no ready explanation to give for this fact. A girl is usually more sensitive than a boy. She is easily squashed by ridicule or sarcasm. Girls are just as keen on general meetings as boys are, but, as I say, they take a less active part. The inferiority complex takes a different form in boys and girls. The girl retires behind her inferiority, while the boy overcompensates for his inferiority by making a brave show of not caring. Thus at a meeting, when Jean is howled at she is likely to retire into her shell, whereas Dave will shout louder than his opponents, and in the end surmount his defeat. Humor comes into it. Girls have as much sense of humor as boys, but they seldom use humor to protect themselves as boys do. Some boys defend themselves in this way with success. I have seen Dave being tried for some anti-social act, but by giving his evidence in a hilarious way, he gets the appreciation of the mob, and succeeds in getting only a minor punishment. A girl never does this; she is ever too ready to see herself in the wrong. Even in the most enlightened homes the girls suffer from the general inferiority that our society forces on womanhood. In a capitalist world women are possessions, and the fact that most married women are economically dependent on their husbands must make all women feel inferior. The girls from Summerhill will, most of them, have jobs which they will carry on after marriage, so that their inferiority is not a personal one so much as a general one.

The usual criticism of co-education is that boys and girls have different capacities for learning. This criticism does not apply to Summerhill where learning is not a fetish, where indeed learning is optional. This subject of learning is important enough to have a new chapter for itself.

The Learning Side

Lessons in Summerhill are optional. Children can go to them or stay away from them—for years if they want to. There is a time-table for the staff, and the children have classes according to their age usually, but sometimes according to their interests. Personally I do not know what type of teaching is carried on, for I never visit lessons, and have no interest in how children learn. We have no new methods of teaching because we do not consider that teaching very much matters.

Children who come as infants attend lessons all the way, but pupils from other schools vow that they will never attend any beastly lessons again. They play and cycle and get in people's way, but they fight shy of any lessons. This sometimes goes on for months, and the recovery time is proportionate to the hatred their last school gave them. Our record case was a girl from a convent. She loafed for three years. The average period of recovery from lesson-aversion is three months.

Strangers to the idea of freedom in the school will be wondering what sort of a madhouse it is where teachers smoke while they teach and children play all day if they want to. Many an adult says: "If I had been sent to a school like that I'd never have done a thing." Others say: "Such children will feel themselves heavily handicapped when they have to compete against children who have been made to learn." I think of Jack who left us at the age of seventeen to go into an engineering factory. One day the managing director sent for him.

"You are the lad from Summerhill," he said. "I'm curious to know how such an education appears to you now that you are mixing with lads from the old schools. Suppose you had to choose again, would you go to Eton or Summerhill?"

"Oh, Summerhill, of course," replied Jack.

"But why? What does it offer that the Public Schools don't offer?"

Jack scratched his head. "I dunno," he said slowly; "I think it gives you a feeling of complete self-confidence."

"Yes," said the manager dryly, "I noticed it when you came into the room."

"Lord," laughed Jack, "I'm sorry if I gave you that impression."

"I liked it," said the director. "Most men when I call them into the office fidget

about and look uncomfortable. You came in as my equal. By the way, what department would you like to change into?"

This story shows that learning does not matter, that only character matters. Jack failed in his Matric. because he hated all book learning, but his lack of knowledge about Lamb's *Essays* or the Trigonometrical Solution of Triangles is not going to handicap him in life.

All the same there is a lot of learning in Summerhill. I don't suppose a group of our twelve year olds could compete with a State school class of equal age in, say, neat handwriting or spelling or vulgar fractions. But in an examination requiring originality our lot would beat the others hollow. We have no class examinations in the school, but sometimes I set an exam for fun. In my last paper appeared the following questions:

Where are the following: Madrid, Thursday Island, yesterday, God, love, my pocket screwdriver (but, alas, there was no helpful answer to this one), democracy, hate, etc.

Give meanings for the following—the number shows how many are expected for each—: Hand (3) . . . only two got the third right—the standard of measure for a horse. Bore (3) . . . club bore, oil well bore, river bore. Shell (3) . . . seaside, "That was Shell that was," undertaker's word for coffin. Brass (4) . . . metal, cheek, money, department of an orchestra . . . "The stuff that Neill is stingy with in his workshop" was allowed double marks as metal and cheek.

Translate Hamlet's To be or Not to be speech into Summerhillese.

These questions are obviously not intended to be serious, and the children enjoy them thoroughly. New-comers, on the whole, do not rise to the answering standard of pupils who have become acclimatized to the school, not that they have less brain power, rather because they have become so accustomed to work in a serious groove that any light touch puzzles them.

This is the play side of our teaching. In all classes much work is done, and if for some reason or another a teacher cannot take his or her class on the appointed time there is usually trouble. David, aged nine, had to be isolated the other day for whooping cough. He cried bitterly.

"I'll miss Roger's lesson in Geography," he protested furiously. David had been in the school practically from birth, and he has definite and final ideas about the necessity of having his lessons given to him. A few years ago someone at a meeting proposed that a culprit should be punished by being banished from lessons for a week. The others protested on the ground that the punishment was too severe.

My staff and I have a hearty hatred of all examinations, and to us the Matric. is anathema. But we cannot refuse to teach children their Matric. subjects. Obviously as long as the thing is in existence it is our master. Hence Summerhill staff is always qualified to teach to the Matric. standard. Not that many children want to take Matric.; only those going to the university do so. I do not think they find it especially hard to tackle this exam. They generally begin to work for it seriously at the age of fourteen, and they do the work in about three years. I don't claim that they always pass at first go. The more important fact is that they try again.

Boys who are going in for engineering do not bother to take Matric. They go straight to training centres of the Faraday House type. They have a tendency to see the world before they settle down to business or university work. The story of Derrick Boyd may become typical of the adventurous spirit that free education encourages. He came at the age of eight and left after passing his Matric. at eighteen. He wanted to be a doctor, but his father could not at the time afford to send him to the university. Derrick thought that he would fill in the waiting time by seeing the world. He went to London docks and spent two days trying to get any job—even as a stoker. He was told that too many real sailors were unemployed, and he went home sadly. Soon a fellow-schoolmate (of Summerhill) told him of an English lady in Spain who wanted a chauffeur. Derrick seized the chance, went out to Spain, built the lady a house or enlarged her existing house, drove her all over Europe, and then went to the university. The lady decided to help him with his university fees and living. After two years the lady asked him to take a year off to motor her to Kenya and there build her a house. He is there now, and the latest news is that he is to finish his medical studies in Capetown.

Larry, who came to us about the age of twelve, passed Matric. at sixteen and went out to Tahiti to grow fruit. Finding this an unpaying spec. he took to driving a taxi. Later he passed on to New Zealand, where I understand he did all sorts of jobs, including driving another taxi. He passed on to Brisbane University, and three weeks ago I had a visit from the Principal of that university, who gave an admiring account of Larry's doings. "When we had a vacation and the students went home," he said, "Larry went out to work as a laborer on a sawmill."

But I promised to be as honest as I could, and I must confess that there are Old Boys who have not shown enterprise. For obvious reasons I cannot describe them, but our successes are always those whose homes are good. Derrick and Jack and Larry had parents who were completely in sympathy with the school, so that the boys never had that most tiresome of conflicts, the thought: Which is right, home or school? And looking at the children we have today I am convinced that the successes will be those whose parents are in agreement with us—when the child comes young enough.

Home and school must be a unity. Mental conflict will handicap a child for life. I think of one unsuccess, a boy whose parents were religious and moral. At school that boy could never settle the doubt about school vs. home, and he went out to face life with this doubt held ready to attach to every decision in life. The boy may have had natural ability, but he never showed it, he was so much inhibited. Other comparative failures have been children who have been pushed on by their parents. In such cases the child becomes resentful, and unconsciously is determined that his parents will not win.

I suddenly see a brilliant opportunity for critics. Ah, this man claims the success for his school when they succeed, and when they are duds he blames the parents! It is not quite true, for as I have said the success is the product of home and school combined. What is true is that only the child without fears and conflict will meet life in the spirit of adventure, and if a home gives fears and conflicts it is a bad home.

In connection with the bad home I shall digress a little on to the question of homesickness. Homesickness is always the sign of a bad home, a home in which there is a lot of hate. The homesick child longs, not for the love of home, but for the strife of home, and for the protection of home. That sounds paradoxical, but it isn't when we reflect that the more unhappy the home is the more the child seeks protection. He has no anchor in life, and he exaggerates the anchorage he calls home. Absent from it he idealizes it and longs, not for the home he knows, but for the home it has been to him in his wishes.

To return to learning, parents are slow in realizing how unimportant the learning side of school is. Children, like adults, learn what they want to learn in life, but all the prize-giving and marks and

exams sidetrack the personality. Only pedants can claim that learning from books is education. Books are the least important apparatus in a school. All that any child needs is the Three R's; the rest should be tools and clay and sports and theatres and paints—and freedom.

The question arises: Do girls really flourish under a system of freedom as easily as boys do? Do the girls show desires to see the world as stokers or taxi-drivers? So far we have had only two girls who came as infants and left as true products of Summerhill. One is a B.A. (Psychologist) and the other is a chemist. Whether it be that life holds less adventure for women than for men, our girls on the whole do not go off on wild schemes. We are still at a stage when life holds more for men than for women. The economic market for women is not a wide one. Dull jobs there are, of course, jobs in offices and shops. Economic necessity may send our girls into dull jobs, but they are more likely to go in for the stage or art or medicine. At the moment two old girls are at art schools in London, but today there is no living in art except the commercial kind—advertising and general poster work. I know of men well known in the poster world, who cannot live by their art.

Summerhill has had comparatively few girls who made, as it were, the whole course. This is not easy to account for. Up to a few years ago girls were apt to come late to school; we had lots of failures from convents and girls' schools, and we have never accepted a child who came late as a true example of a free education. These girls who came late were usually children of parents who had no appreciation of freedom (if they had had their girls would not have been problems), and when the girl was cured of her special failing she was whisked off to "a nice school where she will be educated." But for the past six or seven years we have been getting girls from homes which believed in Summerhill, and a fine bunch they are too, full of beans and originality and initiative.

We have lost girls occasionally for financial reasons, sometimes when their brothers were kept on at expensive schools. The old tradition of making the sons the important ones in the family dies hard. We have also lost both girls and boys through the possessive jealousy of the parents, who fear that the children should give their home love to their school.

But this chapter is one on learning. I have drifted away from the subject because it means so little to me. The most hopeful thing about the parents now is that they never ask me what Johnnie is learning. They do not have to ask how Johnnie is. They see—and hear.

EDITOR'S NOTE: *In the last issue, we had to leave out a section of the* Excerpts from A. S. Neill's "THE PROBLEM TEACHER" *for reasons of space. This section follows here:*

THE TEACHER AND EXAMINATIONS

Exams are a test of knowledge, and if one holds that knowledge is not the most salient feature in school, one is handicapped in treating the topic of examinations. Problem teachers magnify the importance of examinations, and the worst kind of teacher is he who boasts of his successes in the examination room.

Examinations are the means by which age controls youth. Every boy or girl who sits Matric is conforming to the laws of the old, because without conformation the door is shut to many a career. Because this

exam is the bugbear of education let us consider it. The candidate must pass in five subjects, and pass them all at one sitting. That of course is a cruel and inhuman rule, for there is no rhyme or reason why a lad who fails in Maths should have to sit four other subjects when he tries again months later. The candidate has a choice of subjects within certain limits, and certain subjects are compulsory. English is one, so that a youth who is mathematical and whose only interest is in electricity has to study Lamb's Essays and a Shakespeare play before he is allowed to enter his life's subject.

The question arises: How are we to select our students for the universities if we abolish the Matric and the School Leavings? And if we do abolish it, how about the man who wants to be a doctor? Are we to let him loose on society without testing his capabilities and knowledge in any way? Awkward questions to answer.

Under a system that crowds students into large classes the examination way is possibly the only practical one. But if students could work always with their professors in small groups the examination might well give place to a system wherein the professor's estimate of the student would be the equivalent of the exam. In business we do not set exams: a man is promoted when he shows that he knows his subject, and the chief of a factory does not need to examine a youth when he promotes him from the lathe to the designing room. The chief objection to any such system would be that a professor might allow personal factors to warp his judgment, and might be unjust to the youth he did not like. One way out of this difficulty would be to have a freedom to change from one teacher to another.

This system is used in schools but not wholly. In the Leaving Certificate the teacher's estimation of a pupil is taken into account, and that is a real advance in measuring educational ability (within the narrow limits allowed to ability).

But what about Matric? I should abolish it lock, stock, and barrel. Failing that I should make it an oral conversation between examiner and candidate. In all humility I should take on the task of telling in ten minutes' conversation whether a youth is capable of taking a university degree or not.

Exams very often have a bad effect on children. The dull child acquires an inferiority hat life will find it difficult to rid him of, while the bright child may get a bee in his bonnet about his prowess. In the larger life outside the school we are not judged by the percentage of marks we make.

Since exams are not likely to be abolished for a long time, I have a practical proposition to make. It is this: that every teacher be compelled to sit Matric every time his students go forward for that exam. That would give them a fresh, if fearful, orientation to the examination system. Personally I could not pass Matric. I might scrape through in English, Maths, and German, but could not possibly pass in any other subjects. How salutary it would be for the children of a secondary school to learn that their Maths master had failed in four subjects . . . including Maths!

Teachers should realize that success in life has little or nothing to do with trumpery little examinations. With the exception of university professors there is hardly a man of merit who has attained his eminence by passing exams. The great writers, the artists, the composers, the statesmen, the actors, the teachers . . . their success is due to factors that no examination can touch. Examinations may be useful in the selection of the second-best in life, but that is about all they can do.

The examination has a deep motive behind it: it concentrates the interest of the dispossessed classes on the minor successes

of life: it dresses up the pedagogical goose in the feathers of a swan. It distracts the attention of the people from things that matter. It is the gilt medal that royalty, in its munificence, bestows on the humble subject for loyalty: it is the gewgaw that the imperialist hands out to the ignorant savage, who values a glass bead higher than his pearls and gold. Examinations play a part in the keeping of the people down, for they form a link in the chain of snobbery that binds the lower orders so tightly.

They have too a religious significance, a moral element. The great and final examination takes place at the Judgment Seat, and the examination dream usually betrays a fear of death and punishment . . . I have found more than once in analyzing young students that the passing of an exam was linked up with the desire to overcome the habit of masturbation. This is an alarming discovery: it makes the exam ideal not only futile but soul-destroying and guilt-forming. I am convinced that, behind the rational idea that the exam selects the clever, is the unconscious moral idea that the exam separates the sheep from the goats. Children have the uncanny ability to ignore the rational and feel the irrational, and no child who has been taught to fear God can sit an exam without unconscious fears being aroused. We read sometimes of students who are so depressed after failing in an exam that they commit suicide. In such cases the exam itself is only the Serajevo shot that started the Great War: the suicide is the result of the moral failure that the failure in the examination symbolized. The self-destruction is punishment for sexual failure, or rather failure to overcome sex temptation.

That brings me to my final criticism of examinations. They concentrate on what is in the head, and the million times more important question of what is in the heart is ignored. They deal with the minor conscious, and sidetrack the major unconscious. This aspect requires a chapter to itself.

So long as ours is a class society I cannot see how the teacher is to rise above class. So long as Lady Bountiful lives in the manor, I cannot see how the village schoolmaster is to have a proper self respect. One of my painful memories is that of an interview with the local squiress who complained because a boy had not touched his cap to her. I tried to explain to her that I was astounded, because I had taught the boys to lift their caps to her and to the woman who did the school charring.

In a definite manner you are preparing the children for this outside standard of living; by making schooling competitive with marks and prizes and examinations, you are preparing the child for the destructive competitiveness of capitalism, where it is a case of deil tak the henmost.

I have suggested earlier in this book the reason why this is so, the reason that the schools are made to subserve the motives of the ruling class. Naturally the ruling class has no intention of changing this system which produces servants and sycophants. But the teaching profession could change it if it were a united profession, conscious of its position and its exploitation, conscious that it was doing the dirty work of its masters. It could change it if the young men and women of the profession refused to allow it to be ruled by the old men, refused to elect only elders to the executive posts in the National Union of Teachers.

of life: it dresses up the pedagogical goose in the feathers of a swan. It distracts the attention of the people from things that matter. It is the gilt medal that royalty, in its munificence, bestows on the humble subject for loyalty: it is the gewgaw that the imperialist hands out to the ignorant savage, who values a glass bead higher than his pearls and gold. Examinations play a part in the keeping of the people down, for they form a link in the chain of snobbery that binds the lower orders so tightly.

They have too a religious significance, a moral element. The great and final examination takes place at the Judgment Seat, and the examination dream usually betrays a fear of death and punishment . . . I have found more than once in analyzing young students that the passing of an exam was linked up with the desire to overcome the habit of masturbation. This is an alarming discovery: it makes the exam ideal not only futile but soul-destroying and guilt-forming. I am convinced that, behind the rational idea that the exam selects the clever, is the unconscious moral idea that the exam separates the sheep from the goats. Children have the uncanny ability to ignore the rational and feel the irrational, and no child who has been taught to fear God can sit an exam without unconscious fears being aroused. We read sometimes of students who are so depressed after failing in an exam that they commit suicide. In such cases the exam itself is only the Serajevo shot that started the Great War: the suicide is the result of the moral failure that the failure in the examination symbolized. The self-destruction is punishment for sexual failure, or rather failure to overcome sex temptation.

That brings me to my final criticism of examinations. They concentrate on what is in the head, and the million times more important question of what is in the heart is ignored. They deal with the minor conscious, and sidetrack the major unconscious. This aspect requires a chapter to itself.

So long as ours is a class society I cannot see how the teacher is to rise above class. So long as Lady Bountiful lives in the manor, I cannot see how the village schoolmaster is to have a proper self respect. One of my painful memories is that of an interview with the local squiress who complained because a boy had not touched his cap to her. I tried to explain to her that I was astounded, because I had taught the boys to lift their caps to her and to the woman who did the school charring.

In a definite manner you are preparing the children for this outside standard of living; by making schooling competitive with marks and prizes and examinations, you are preparing the child for the destructive competitiveness of capitalism, where it is a case of dog eat dog.

I have suggested earlier in this book the reason why this is so, the reason that the schools are made to subserve the motives of the ruling class. Naturally the ruling class has no intention of changing this system which produces servants and sycophants. But the teaching profession could change it if it were a united profession, conscious of its position and its exploitation, conscious that it was doing the dirty work of its masters. It could change it if the young men and women of the profession refused to allow it to be ruled by the old men, refused to elect only elders to the executive posts in the National Union of Teachers.

THE DISCOVERY OF THE ORGONE

VOL. I

THE FUNCTION OF THE ORGASM

SEX-ECONOMIC PROBLEMS OF BIOLOGICAL ENERGY

By WILHELM REICH

Price, $3.00 xxxvi + 368 pages

CHARACTER-ANALYSIS

PRINCIPLES AND TECHNIQUE. FOR PSYCHOANALYSTS IN PRACTICE AND IN TRAINING

Second Edition

By WILHELM REICH

Price, $4.50 xxii + 328 pages

ORGONE INSTITUTE PRESS

157 CHRISTOPHER STREET

New York 14, N. Y.

THE SEXUAL REVOLUTION

TOWARD A SELF-GOVERNING CHARACTER STRUCTURE

By WILHELM REICH

Price, $3.25 xxvii + 273 pages

THE MASS PSYCHOLOGY OF FASCISM

THIRD, REVISED AND ENLARGED EDITION

By WILHELM REICH

Price, $4.50 xxiv + 344 pages

ORGONE INSTITUTE PRESS

157 CHRISTOPHER STREET

New York 14, N. Y.